Exercises

[A] : Choose The Correct Answer :

1	$\left(\frac{4}{7}\right)^0$ = ... (a) 0 (b) 1 (c) $\frac{4}{7}$ (d) – 1
2	$\left(\frac{-2}{3}\right)^2$ = ... (a) $\frac{4}{9}$ (b) $\frac{-4}{9}$ (c) $\frac{4}{6}$ (d) $\frac{-4}{6}$
3	$6 \div 3^0$ = ... (a) 2 (b) 3 (c) 0 (d) 6
4	If $x = y$, then 5^{x-y} = ... (a) 5 (b) 1 (c) 0 (d) – 1
5	If a = b , then $\left(\frac{3}{7}\right)^{b-a}$ equal ..... (a) zero (b) 1 (c) $\frac{3}{7}$ (d) $\frac{7}{3}$
6	If $x = y$, then $\left(\frac{3}{5}\right)^{x-y}$ = ... (a) 0 (b) 1 (c) $\frac{3}{5}$ (d) $\frac{5}{3}$
7	$2^3 \times 2^5$ = ... (a) 2^2 (b) 2^8 (c) 2^{15} (d) 2^{53}
8	$2^3 \times 2^3$ = ... (a) 2^6 (b) 2^8 (c) 2^{15} (d) 2^{53}
9	3×3^2 = ... (a) 9 (b) 3^3 (c) 12 (d) 6
10	$3^5 \times 2^5$ = ... (a) 5^{10} (b) 6^{10} (c) 6^5 (d) 6^{25}
11	Half of 2^{10} = ... (a) 2^9 (b) 2^5 (c) 1^{10} (d) 1^5
12	Half the number 2^{20} = ... (a) 2^{10} (b) 2^{21} (c) 2^{19} (d) 40
13	The half of the number 2^{16} is ..... (a) 2^8 (b) 1^8 (c) 2^6 (d) 2^{15}

14	Half of 4^{20} = ...			
	(a) 4^{19}	(b) 2^{20}	(c) 4^{39}	(d) 2^{39}
15	Quarter of 4^{20} equals			
	(a) 4^{5}	(b) 4^{10}	(c) 4^{19}	(d) 1^{20}
16	Quarter of 4^{2} = ...			
	(a) 16	(b) 2	(c) 1	(d) 4
17	The additive inverse of the number $(-3)^3$ is			
	(a) 27	(b) – 27	(c) 9	(d) – 9
18	The multiplicative inverse of $(-1)^2$			
	(a) – 1	(b) – 2	(c) 2	(d) 1
19	3 + 3 + 3 = ...			
	(a) 3^0	(b) 3^1	(c) 3^2	(d) 3^3
20	$3^{10} + 3^{10} + 3^{10}$ = ...			
	(a) 3^{10}	(b) 3^{11}	(c) 3^{20}	(d) 3^{30}
21	$3^5 + 3^5 + 3^5$ = ...			
	(a) 9^5	(b) 9^{15}	(c) 3^{15}	(d) 3^6
22	$3^x + 3^x + 3^x$ = ...			
	(a) 3^x	(b) 27^x	(c) $3x^3$	(d) 3^{x+1}
23	$\left(\frac{-5}{6}\right)^2 \div 3\frac{3}{4}$ = ...			
	(a) $\frac{-5}{27}$	(b) $\frac{5}{27}$	(c) $\left(\frac{5}{27}\right)^2$	(d) $\frac{27}{5}$
24	0.354 × 100 = ...			
	(a) 3.54	(b) 35.4	(c) 354	(d) 3540
25	$\frac{0.03}{0.01}$ = ...			
	(a) 1	(b) 3	(c) 0.03	(d) 0.3
26	|– 3| + |5| = ...			
	(a) – 8	(b) – 2	(c) 2	(d) 8
27	$\frac{9}{20}$ = ... %			
	(a) 9	(b) 18	(c) 27	(d) 45
28	The prime number is			
	(a) 0	(b) 1	(c) 2	(d) – 2

29	Which of the following is the greatest ? (a) 33% (b) 0.5 (c) $\frac{1}{5}$ (d) 0.25
30	What is the best estimated of the fraction $\frac{1}{6}$? (a) 15% (b) 17% (c) 20% (d) 25%
31	The value of 7 in the number 4375 is ..... (a) 0.7 (b) 7 (c) 70 (d) 700
32	If a = 3 , b = – 2 , then the value of : 3 a b = ... (a) zero (b) 18 (c) – 18 (d) 4
33	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{7}{8}$, ... (In the same pattern) (a) $\frac{1}{5}$ (b) $\frac{8}{9}$ (c) $\frac{15}{16}$ (d) $\frac{20}{25}$
34	$\frac{4\,a^2\,b^4}{2\,a^3\,b^3}$ = ... (a) 2 a b (b) 2 a^5 b^7 (c) $\frac{2\,b}{a}$ (d) $\frac{2}{a\,b}$

[B] : Complete the Following : -

1	3^{zero} = ...
2	$\left(\frac{-2}{3}\right)^0$ = ...
3	$5\,x^0$ = ...
4	$(x-2)^{zero} = 1$ if $x \neq$ .....
5	The additive inverse of $\left(\frac{\sqrt{2}}{3}\right)^0$ = ...
6	The additive inverse of $(-1)^3$ = ...
7	The additive inverse of $\left(\frac{-2}{3}\right)^0$ is .....
8	The multiplicative inverse of $\left(\frac{-2}{3}\right)^2$ is .....
9	If a = b , then $\left(\frac{3}{11}\right)^{a-b}$ = ...

10	$\|6\|+\|-6\|=$ .....
11	The multiplicative inverse of 7 = ...
12	If $\frac{x}{y}=\frac{3}{2}$, then $\frac{2x}{5y}=$ ..... = ...
13	If $\frac{x}{y}=\frac{7}{2}$, then $\frac{2x}{7y}=$ .....
14	If $\frac{x}{y}=\frac{3}{2}$, then $\frac{2x}{3y}=$ .....
15	$459.799\overset{\sim}{\sim}$ ..... to the nearest tenth
16	If $\frac{P}{2}=4$, $\frac{Q}{3}=1$, then P : Q = ... : .....
17	1 , 1 , 2 , 3 , 5 , 8 , ... , ... (in its same pattern)
18	(1 , 2 , 3 , 5 , 8 , 13 , ... , ... (in the same pattern)
19	3 , 5 , 7 , 9 , ... (in the same pattern)
20	$\frac{1}{9}$, $\frac{1}{8}$, $\frac{1}{7}$, ... , ... (In the same pattern).
21	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{7}{8}$, $\frac{15}{16}$, ... , ... (In the same pattern)
22	$\frac{1}{9}$, $\frac{1}{8}$, $\frac{1}{7}$, ... , ... (In the same pattern).
23	The term whose order is 50^{th} in the pattern $\left(\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}, \ldots\right)$ is .....
24	If a = b , then $7^{b-a}=$ .....
25	If $x=y$, then $5^{x-y}=$ .....
26	$2^2 \times 2 = 2^{\ldots}=$ .....
27	Quarter of 4^{20} equals $4^{\ldots\ldots}$

28	If $\left(\frac{5}{6}\right)^n = \frac{25}{36}$, then n = ...
29	$\left(\frac{2}{7}\right)^5 \div \left(\frac{2}{7}\right)^3$ = ...
30	If $2^x = 3$, then 4^x = ...
31	$\frac{a^2}{b^2} \times \left(\frac{b}{c}\right)^2$ = ... in the simplest form where $b \neq 0$ and $c \neq 0$

[C] : Essay Problems : -

1	**Find the result of :** $\frac{7^2 \times 7}{7 \times 7^3}$ 2016 Exam (10) Question (4) (b)
2	**Simplify** $\frac{x^2 \times x^3}{x^5}$ where $x \neq 0$ 2016 Exam (14) Question (4) (b) (1)
3	**Simplify :** $\frac{7^3 \times 7^3}{(-7)^2}$ 2018 Exam (13) Question (5) (b)
4	**Simplify :** $\frac{5^3 \times (-5)^7}{(-5)^8}$ 2016 Exam (1) Question (3) (a)
5	**Calculate :** $\frac{(-3)^5 \times (-3)^4}{(-3)^7 \times (-3)}$ 2018 Exam (3) Question (4) (a)
6	**Put the following expression in the simplest form :** $\frac{(-x)^4 \times x^7}{(x^2)^3}$ where $x \neq 0$ 2016 Exam (9) Question (5) (b)
7	**Simplify to the simplest form :** $\left(\frac{1}{2}\right)^2 \times \left(\frac{-1}{2}\right)^3$ 2018 Exam (1) Question (3) (a)
8	**Calculate :** $\frac{(5)^2 + (5)^4}{(5)^3}$ 2018 Exam (3) Question (4) (a)

Homework

[A] : Choose The Correct Answer :

1	$3 \times 3^2 =$ ..... (a) 9 (b) 3^3 (c) 12 (d) 6
2	The multiplicative inverse of $(-1)^2$ ..... (a) -1 (b) -2 (c) 2 (d) 1
3	$\frac{9}{20} =$ ..... % (a) 9 (b) 18 (c) 27 (d) 45
4	$2^3 \times 2^3 =$ ..... (a) 2^6 (b) 2^8 (c) 2^{15} (d) 2^{53}
5	The additive inverse of the number $(-3)^3$ is ..... (a) 27 (b) -27 (c) 9 (d) -9
6	$\lvert -3 \rvert + \lvert 5 \rvert =$ ..... (a) -8 (b) -2 (c) 2 (d) 8
7	$2^3 \times 2^5 =$ ..... (a) 2^2 (b) 2^8 (c) 2^{15} (d) 2^{53}
8	Quarter of $4^2 =$ ..... (a) 16 (b) 2 (c) 1 (d) 4
9	$\frac{0.03}{0.01} =$ ..... (a) 1 (b) 3 (c) 0.03 (d) 0.3
10	$\frac{4\,a^2\,b^4}{2\,a^3\,b^3} =$ ..... (a) $2\,a\,b$ (b) $2\,a^5\,b^7$ (c) $\frac{2\,b}{a}$ (d) $\frac{2}{a\,b}$
11	$\left(\frac{4}{7}\right)^0 =$ ..... (a) 0 (b) 1 (c) $\frac{4}{7}$ (d) -1
12	If $x = y$, then $\left(\frac{3}{5}\right)^{x-y} =$ ..... (a) 0 (b) 1 (c) $\frac{3}{5}$ (d) $\frac{5}{3}$
13	Quarter of 4^{20} equals ..... (a) 4^5 (b) 4^{10} (c) 4^{19} (d) 1^{20}

14	$0.354 \times 100 =$				
	(a) 3.54	(b) 35.4	(c) 354	(d) 3540	
15	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{7}{8}$, ... (In the same pattern)				
	(a) $\frac{1}{5}$	(b) $\frac{8}{9}$	(c) $\frac{15}{16}$	(d) $\frac{20}{25}$	
16	If a = b , then $\left(\frac{3}{7}\right)^{b-a}$ equal				
	(a) zero	(b) 1	(c) $\frac{3}{7}$	(d) $\frac{7}{3}$	
17	Half of 4^{20} = ...				
	(a) 4^{19}	(b) 2^{20}	(c) 4^{39}	(d) 2^{39}	
18	$\left(\frac{-5}{6}\right)^2 \div 3\frac{3}{4}$ = ...				
	(a) $\frac{-5}{27}$	(b) $\frac{5}{27}$	(c) $\left(\frac{5}{27}\right)^2$	(d) $\frac{27}{5}$	
19	If a = 3 , b = – 2 , then the value of : 3 a b = ...				
	(a) zero	(b) 18	(c) – 18	(d) 4	
20	If $x = y$, then 5^{x-y} = ...				
	(a) 5	(b) 1	(c) 0	(d) – 1	
21	The half of the number 2^{16} is				
	(a) 2^8	(b) 1^8	(c) 2^6	(d) 2^{15}	
22	$3^x + 3^x + 3^x$ = ...				
	(a) 3^x	(b) 27^x	(c) $3x^3$	(d) 3^{x+1}	
23	The value of 7 in the number 4375 is				
	(a) 0.7	(b) 7	(c) 70	(d) 700	
24	$6 \div 3^0$ = ...				
	(a) 2	(b) 3	(c) 0	(d) 6	
25	Half the number 2^{20} = ...				
	(a) 2^{10}	(b) 2^{21}	(c) 2^{19}	(d) 40	
26	$3^5 + 3^5 + 3^5$ = ...				
	(a) 9^5	(b) 9^{15}	(c) 3^{15}	(d) 3^6	
27	What is the best estimated of the fraction $\frac{1}{6}$?				
	(a) 15%	(b) 17%	(c) 20%	(d) 25%	
28	$\left(\frac{-2}{3}\right)^2$ = ...				
	(a) $\frac{4}{9}$	(b) $\frac{-4}{9}$	(c) $\frac{4}{6}$	(d) $\frac{-4}{6}$	

29	Half of 2^{10} = ...				
	(a) 2^9	(b) 2^5	(c) 1^{10}	(d) 1^5	
30	$3^{10} + 3^{10} + 3^{10}$ = ...				
	(a) 3^{10}	(b) 3^{11}	(c) 3^{20}	(d) 3^{30}	
31	Which of the following is the greatest ?				
	(a) 33%	(b) 0.5	(c) $\frac{1}{5}$	(d) 0.25	
32	$3^5 \times 2^5$ = ...				
	(a) 5^{10}	(b) 6^{10}	(c) 6^5	(d) 6^{25}	
33	3 + 3 + 3 = ...				
	(a) 3^0	(b) 3^1	(c) 3^2	(d) 3^3	
34	The prime number is				
	(a) 0	(b) 1	(c) 2	(d) – 2	

[B] : Complete the Following : -

1	If a = b , then $\left(\frac{3}{11}\right)^{a-b}$ = ...
2	(1 , 2 , 3 , 5 , 8 , 13 , ... , ... (in the same pattern)
3	Quarter of 4^{20} equals $4^{.....}$
4	The multiplicative inverse of $\left(\frac{-2}{3}\right)^2$ is .....
5	1 , 1 , 2 , 3 , 5 , 8 , ... , ... (in its same pattern)
6	$2^2 \times 2 = 2^{.....}$ = ...
7	The additive inverse of $\left(\frac{-2}{3}\right)^0$ is .....
8	If $\frac{P}{2} = 4$, $\frac{Q}{3} = 1$, then P : Q = ... : .....
9	If $x = y$, then 5^{x-y} = ...
10	The additive inverse of $(-1)^3$ = ...
11	459.799 ≃ ..... to the nearest tenth

12	If a = b , then 7^{b-a} = ...
13	The additive inverse of $\left(\frac{\sqrt{2}}{3}\right)^0$ = ...
14	If $\frac{x}{y} = \frac{3}{2}$, then $\frac{2x}{3y}$ = ...
15	The term whose order is 50^{th} in the pattern $\left(\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}, ...\right)$ is .....
16	$(x-2)^{zero} = 1$ if $x \neq$ .....
17	If $\frac{x}{y} = \frac{7}{2}$, then $\frac{2x}{7y}$ = ...
18	$\frac{1}{9}$, $\frac{1}{8}$, $\frac{1}{7}$, ... , ... (In the same pattern).
19	$\frac{a^2}{b^2} \times \left(\frac{b}{c}\right)^2$ = ... in the simplest form where $b \neq 0$ and $c \neq 0$
20	3^{zero} = ...
21	$5x^0$ = ...
22	If $\frac{x}{y} = \frac{3}{2}$, then $\frac{2x}{5y}$ = ... = ...
23	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{7}{8}$, $\frac{15}{16}$, ... , ... (In the same pattern)
24	If $2^x = 3$, then 4^x = ...
25	$\left(\frac{-2}{3}\right)^0$ = ...
26	The multiplicative inverse of 7 = ...
27	$\frac{1}{9}$, $\frac{1}{8}$, $\frac{1}{7}$, ... , ... (In the same pattern).
28	$\left(\frac{2}{7}\right)^5 \div \left(\frac{2}{7}\right)^3$ = ...

29	$\|6\|+\|-6\|=$ .....
30	3 , 5 , 7 , 9 , ... (in the same pattern)
31	If $\left(\frac{5}{6}\right)^n = \frac{25}{36}$, then n = ...

[C] : Essay Problems : -

1	**Calculate :** $\frac{(5)^2+(5)^4}{(5)^3}$ 2018 Exam (3) Question (4) (a)
2	**Simplify to the simplest form :** $\left(\frac{1}{2}\right)^2 \times \left(\frac{-1}{2}\right)^3$ 2018 Exam (1) Question (3) (a)
3	**Put the following expression in the simplest form :** $\frac{(-x)^4 \times x^7}{(x^2)^3}$ where $x \neq 0$ 2016 Exam (9) Question (5) (b)
4	**Calculate :** $\frac{(-3)^5 \times (-3)^4}{(-3)^7 \times (-3)}$ 2018 Exam (3) Question (4) (a)
5	**Simplify :** $\frac{5^3 \times (-5)^7}{(-5)^8}$ 2016 Exam (1) Question (3) (a)
6	**Find the result of :** $\frac{7^2 \times 7}{7 \times 7^3}$ 2016 Exam (10) Question (4) (b)
7	**Simplify :** $\frac{7^3 \times 7^3}{(-7)^2}$ 2018 Exam (13) Question (5) (b)
8	**Simplify** $\frac{x^2 \times x^3}{x^5}$ where $x \neq 0$ 2016 Exam (14) Question (4) (b) (1)

Exercises

[B] Choose the correct : -

1 $(a^{-1})^{-3} = a^{\cdots\cdots}$

A) 3 B) 4 C) 6 D) 8

2 $(a^{-2})^{-3} = a^{\cdots\cdots}$

A) 3 B) 4 C) 6 D) 8

3 $(a^{-1})^{3} = a^{\cdots\cdots}$

A) – 3 B) – 4 C) – 6 D) – 8

4 $(a^{-2})^{2} = a^{\cdots\cdots}$

A) – 3 B) – 4 C) – 6 D) – 8

5 $(a^{-2})^{3} = a^{\cdots\cdots}$

A) – 3 B) – 4 C) – 6 D) – 8

6 $(a^{-1})^{8} = a^{\cdots\cdots}$

A) – 3 B) – 4 C) – 6 D) – 8

7 $(a^{-4})^{2} = a^{\cdots\cdots}$

A) – 3 B) – 4 C) – 6 D) – 8

8 $(3a^{-1})^{-1} =$ .....

A) $\frac{a}{2}$ B) $\frac{a}{3}$ C) $\frac{X}{5}$ D) $\frac{X}{7}$

9 $(7X^{-1})^{-1} =$ .....

A) $\frac{a}{2}$ B) $\frac{a}{3}$ C) $\frac{X}{5}$ D) $\frac{X}{7}$

10	$3^6 \times 3^{-5} =$ ..... A) 9 B) 27 C) 81 D) 3	
11	$3^5 \times 3^{-5} =$ ..... A) 9 B) 1 C) 81 D) 3	
12	$5^{-1} =$ ..... A) $\frac{1}{7}$ B) $\frac{1}{5}$ C) $\frac{1}{3}$ D) $\frac{1}{2}$	
13	$2^{-1} =$ ..... A) $\frac{1}{7}$ B) $\frac{1}{5}$ C) $\frac{1}{3}$ D) $\frac{1}{2}$	
14	$10^{-1} = \frac{1}{.....}$ ..... A) 10 B) 100 C) 1000 D) 10 000	
15	$10^{-3} = \frac{1}{.....}$ ..... A) 10 B) 100 C) 1000 D) 10 000	
16	$(\frac{1}{7})^{-1} =$ ..... A) 5 B) 7 C) 3 D) 2	
17	$(\frac{1}{2})^{-1} =$ ..... A) 5 B) 7 C) 3 D) 2	
18	$(\frac{-1}{7})^{-1} =$ ..... A) – 5 B) – 7 C) – 3 D) – 2	
19	$(\frac{-1}{2})^{-1} =$	

	A) 5 B) 7 C) – 2 D) 2	
20	$(\frac{1}{7})^{-2}$ = ... A) 49 B) 7 C) 3 D) 2	
21	$(\frac{1}{2})^{-2}$ = ... A) 5 B) 7 C) 4 D) 2	
22	$(\frac{2}{7})^{-1}$ = ... A) $\frac{7}{2}$ B) $\frac{3}{5}$ C) $\frac{4}{9}$ D) $\frac{6}{5}$	
23	$(\frac{9}{4})^{-1}$ = ... A) $\frac{7}{2}$ B) $\frac{3}{5}$ C) $\frac{4}{9}$ D) $\frac{6}{5}$	
24	$(-\frac{1}{3})^{-2}$ = ... A) 9 B) – 27 C) 81 D) – 243	
25	$(-\frac{1}{3})^{-4}$ = ... A) 9 B) – 27 C) 81 D) – 243	
26	$(\frac{2}{3})^{-2}$ = ... A) $\frac{9}{4}$ B) $\frac{27}{8}$ C) $\frac{81}{16}$ D) $\frac{243}{32}$	
27	$(\frac{2}{3})^{-4}$ = ... A) $\frac{9}{4}$ B) $\frac{27}{8}$ C) $\frac{81}{16}$ D) $\frac{243}{32}$	

28 $(\frac{-2}{3})^{-3}$ = ...

A) $\frac{9}{4}$ B) $-\frac{27}{8}$ C) $\frac{81}{16}$ D) $\frac{243}{32}$

29 $3\ a^{-1}$ = ...

A) $-3X$ B) $3X$ C) $\frac{3}{a}$ D) $\frac{2}{X}$

30 $5\ y^{-1}$ = ...

A) $-5X$ B) $\frac{5}{y}$ C) $\frac{1}{5y}$ D) $\frac{5}{X}$

31 $(\frac{1}{5})^{-2} = (.....)^2$

A) 7 B) 5 C) 3 D) 2

32 $(\frac{1}{2})^{-2} = (.....)^2$

A) 7 B) 5 C) 3 D) 2

33 If : a = -3 , then $a^{-3} = \frac{1}{.....}$ .....

A) 9 B) -9 C) 27 D) -27

34 If : a = -2 , then $a^{-3} = \frac{1}{.....}$ .....

A) 4 B) -4 C) 8 D) -8

35 The multiplicative inverse of the number 2^{-1} is .....

A) 2 B) -2 C) $\frac{1}{2}$ D) $-\frac{1}{2}$

36 The multiplicative inverse of the number 3^{-1} is .....

A) 3 B) -3 C) $\frac{1}{3}$ D) $-\frac{1}{3}$

Exercises

[B] Choose the correct : -

1	The quadrilateral has .....sides. a) 5 b) 6 c) 7 d) 4
2	The hexagon has .....sides. a) 5 b) 6 c) 7 d) 4
3	The pentagon has .....sides. a) 5 b) 6 c) 7 d) 4
4	The heptagon has .....sides. a) 5 b) 6 c) 7 d) 4
5	The octagon has .....sides. a) 5 b) 6 c) 8 d) 4
6	The number of sides in the octagon is ..... sides . a) 3 b) 8 c) 7 d) 4
7	The number of sides in the pentagon is ..... sides . a) 5 b) 6 c) 7 d) 4
8	The number of sides in the hexagon is ..... sides . a) 5 b) 6 c) 7 d) 4
9	The number of sides in the quadrilateral is ..... sides . a) 5 b) 6 c) 7 d) 4
10	The polygon of 8 sides is called ..... a) Triangle. b) Heptagon. c) Quadrilateral. d) Octagon.
11	The polygon of 6 sides is called ..... . a) pentagon. b) hexagon. c) octagon. d) heptagon.
12	The polygon of 4 sides is called ..... . a) pentagon. b) hexagon. c) Quadrilateral. d) Heptagon.
13	The polygon of 7 sides is called ..... . a) pentagon. b) hexagon. c) octagon. d) heptagon.
14	The sum of the measures of the exterior angles of a polygon of n sides is ..... a) (n – 2) b) (n – 2) x 180° c) 360° d) (n – 3) × 180°

	a) 60° b) 90° c) 72° d) 120°	
31	The measure of the exterior angle of the square = ... ° a) 60° b) 90° c) 30° d) 120°	
32	The measure of the exterior angle of the regular octagon = ... ° a) 60° b) 45° c) 30° d) 120°	
33	The measure of the exterior angle of the regular hexagon = ... ° a) 60° b) 90° c) 30° d) 120°	
34	The sum of the measures of the exterior angles of a polygon of n sides is ..... a) (n – 2) b) (n – 2) x 180° c) 360° d) (n – 3) × 180°	
35	If the measure of each interior angle of a polygon is 60° , It has ..... Sides a) 3 b) 4 c) 5 d) 6	
36	If the measure of each interior angle of a polygon is 90° , It has ..... Sides a) 3 b) 4 c) 5 d) 6	
37	If the measure of each interior angle of a polygon is 108° , It has ..... Sides a) 3 b) 4 c) 5 d) 6	
38	If the measure of each interior angle of a polygon is 120° , It has ..... Sides a) 3 b) 4 c) 5 d) 6	
39	If the measure of each interior angle of a polygon is 135° , It has ..... Sides a) 3 b) 4 c) 5 d) 8	
40	The sum of the measures of the exterior angles of a polygon of n sides is ..... a) (n – 2) b) (n – 2) x 180° c) 360° d) (n – 3) × 180°	
41	The number of the diagonals of a hexagon is ..... a) 3 b) 0 c) 4 d) 9	
42	The number of the diagonals of a quadrilateral is ..... a) 3 b) 0 c) 4 d) 2	
43	The number of the diagonals of a pentagon is ..... a) 3 b) 5 c) 4 d) 2	
44	The number of the diagonals of a hexagon is ..... a) 3 b) 0 c) 4 d) 9	
45	The number of the diagonals of a triangle is ..... a) 3 b) 0 c) 4 d) 2	

15	The sum of the measures of the interior angles of a triangle = ...° a) 90 b) 360 c) 180 d) 540	
16	The sum of the measures of the interior angles of a pentagon is .....° a) 360° b) 450° c) 720° d) 540°	
17	The sum of measures of the interior angles of an octagon = ... ° a) 540° b) 720° c) 1080° d) 900°	
18	The sum of measures of the exterior angles of the hexagon = ... ° a) 720 ° b) 120 ° c) 180 ° d) 360 °	
19	The sum of measures of the exterior angles of the Quadrilateral = ... ° a) 720 ° b) 120 ° c) 180 ° d) 360 °	
20	The sum of measures of the exterior angles of the Heptagon = ... ° a) 720 ° b) 900 ° c) 180 ° d) 360 °	
21	The sum of the measures of the exterior angles of a polygon of n sides is ..... a) (n – 2) b) (n – 2) x 180° c) 360° d) (n – 3) × 180°	
22	The measure of the interior angle of a equilateral triangle = ... ° a) 900° b) 180° c) 540° d) 60°	
23	The measure of the interior angle of a regular pentagon = ... ° a) 900° b) 180° c) 540° d) 108°	
24	The measure of each angle of the regular Quadrilateral is ..... ° a) 90° b) 180° c) 90° d) 144°	
25	The measure of each angle of a regular octagon is ..... ° a) 135 b) 180 c) 128 d) 120	
26	The measure of the interior angle of a regular polygon of 18 sides equals .....°. a) 130° b) 140° c) 150° d) 160°	
27	The sum of the measures of the exterior angles of a polygon of n sides is ..... a) (n – 2) b) (n – 2) x 180° c) 360° d) (n – 3) × 180°	
28	The measure of the exterior angle of the equilateral triangle = ... ° a) 60° b) 90° c) 30° d) 120°	
29	The measure of the exterior angle of the regular hexagon = ... ° a) 60° b) 90° c) 30° d) 120°	
30	The measure of the exterior angle of the regular pentagon = ... °	

Exercises

[B] Choose the correct : -

1	The quadrilateral in which only two opposite sides are parallel is called..... a) square b) rectangle c) parallelogram d) trapezium
2	Each two consecutive angles in a parallelogram are ..... angles. a) accumulative b) supplementary c) equal d) complementary
3	If ABCD is a parallelogram, then m (∠ A) = m (∠ .....) a) X b) B c) C d) D
4	If ABCD is a parallelogram, then m (∠ B) = m (∠ .....) a) A b) X c) C d) D
5	If ABCD is a parallelogram, then m (∠ C) = m (∠ .....) a) A b) B c) X d) D
6	ABCD is a parallelogram , m (∠A)= 70° , then m (∠C)= ..... ° a) 110 b) 35 c) 70 d) 140
7	ABCD is a parallelogram if m (∠A)= 130° , then m (∠C)= ..... ° a) 130 b) 50 c) 40 d) 65
8	ABCD is a parallelogram if m (∠ C) = 65° , then m (∠A)= ..... ° a) 130 b) 50 c) 65 d) 40
9	ABCD is a parallelogram in which m (∠A)= 50° , then m (∠B)= ° a) 130 b) 40 c) 20 d) 50
10	ABCD is a parallelogram in which m (∠A) = 55° , then m (∠ B) = ... a) 35° b) 125° c) 55° d) 180°
11	ABCD is a parallelogram in which m (∠B) = 70° , then m (∠A) = ... a) 70° b) 110° c) 140° d) 210°
12	ABCD is a parallelogram in which m(∠A) + m(∠C) =100°, m (∠ A) = ... a) 50° b) 100° c) 130° d) 180°
13	ABCD is a parallelogram in which m(∠A) + m(∠C) =100°, m (∠ C) = ... a) 50° b) 100° c) 130° d) 180°
14	ABCD is a parallelogram in which m(∠A) + m(∠C) =110°, m (∠ C) = ...

	a) 50° b) 55° c) 130° d) 180°
15	ABCD is a parallelogram in which m(∠A) + m(∠C) =100°, m (∠ B) = ... ° a) 130 b) 120 c) 110 d) 100
16	ABCD is a parallelogram in which m(∠A) + m(∠C) =120°, m (∠ B) = ... ° a) 130 b) 120 c) 110 d) 100
17	ABCD is a parallelogram in which m(∠A) + m(∠C) =140°, m (∠ B) = ... ° a) 130 b) 120 c) 110 d) 100
18	ABCD is a parallelogram in , BC = 5 cm. , CD = 3 cm. , its perimeter = ... a) 14 cm. b) 16 cm. c) 18 cm. d) 20 cm.
19	ABCD is a parallelogram in , BC = 5 cm. , CD = 2 cm. , its perimeter = ... a) 14 cm. b) 16 cm. c) 18 cm. d) 20 cm.
20	ABCD is a parallelogram in , BC = 6 cm. , CD = 3 cm. , its perimeter = ... a) 14 cm. b) 16 cm. c) 18 cm. d) 20 cm.
21	The two diagonals are equal in length and not perpendicular in ..... a) a rectangle b) a square c) a rhombus d) a parallelogram
22	The parallelogram whose two diagonals are..... is called a rectangle. a) parallel b) perpendicular c) equal in length d) bisect each other
23	Parallelogram whose diagonals are equal in length and not perpendicular is a) square. b) rectangle. c) rhombus. d) trapezium.
24	ABCD is a rectangle in which m (∠ BAC) = 40° , then m (∠ DAC) = ... a) 50° b) 40° c) 60° d) 30°
25	ABCD is a rectangle in which m (∠ BAC) = 50° , then m (∠ DAC) = ... a) 50° b) 40° c) 60° d) 30°
26	ABCD is a rectangle in which m (∠ BAC) = 60° , then m (∠ DAC) = ... a) 50° b) 40° c) 60° d) 30°
27	The perimeter of the rhombus which its side length 2 cm. is .....cm. a) 8 b) 12 c) 16 d) 20
28	The perimeter of the rhombus which its side length 3 cm. is .....cm. a) 8 b) 12 c) 16 d) 20
29	The perimeter of the rhombus which its side length 4 cm. is .....cm. a) 8 b) 12 c) 16 d) 20

30	The side length of the rhombus which its perimeter 8 cm. is .....cm. a) 1 b) 2 c) 3 d) 4	
31	The side length of the rhombus which its perimeter 4 cm. is .....cm. a) 1 b) 2 c) 3 d) 4	
32	The side length of the rhombus which its perimeter 12 cm. is .....cm. a) 1 b) 2 c) 3 d) 4	
33	If ABCD is a rhombus , then AC ⊥ ..... a) BD b) AB c) BC d) CD	
34	If ABCD is a rhombus , then BD ⊥ ..... a) BD b) AC c) BC d) CD	
35	If XYZL is a rhombus , then XZ ⊥ ..... a) XY b) XZ c) YL d) XL	
36	If ABCD is a rhombus and m (∠ ACB) = 40° , then m (∠ C)= ..... a) 60° b) 80° c) 100° d) 120°	
37	If ABCD is a rhombus and m (∠ ACB) = 50° , then m (∠ C)= ..... a) 60° b) 80° c) 100° d) 120°	
38	If ABCD is a rhombus and m (∠ ACB) = 60° , then m (∠ A)= ..... a) 60° b) 80° c) 100° d) 120°	
39	If ABCD is a rhombus and m (∠ ACB) = 50° , then m (∠ B)= ..... a) 130° b) 120° c) 100° d) 80°	
40	If ABCD is a rhombus and m (∠ ACB) = 25° , then m (∠ B)= ..... a) 130° b) 120° c) 100° d) 80°	
41	If ABCD is a rhombus and m (∠ ACB) = 70° , then m (∠ D)= ..... a) 130° b) 40° c) 100° d) 80°	
42	The diagonal of square divided its vertex angle in two angles of the measure of each of them is..... a) 30° b) 45° c)60° d)90°	
43	A diagonal of square makes an angle of measure.....with any of its sides. a) 45° b) 60° c) 90° d) 120°	
44	ABCD is a square , then m (∠ BAC) = ... ° a) 90 b) 60 c) 45 d) 30	

45	The perimeter of a square with side length 3 cm. = ...cm. a) 12 b) 16 c) 20 d) 24	
46	The perimeter of a square with side length 4 cm. = ...cm. a) 12 b) 16 c) 20 d) 24	
47	The perimeter of a square with side length 5 cm. = ...cm. a) 12 b) 16 c) 20 d) 24	
48	The area of square of side length 5 cm is .....cm^2. a) 4 b) 9 c) 16 d) 25	
49	The area of square of side length 4 cm is .....cm^2. a) 4 b) 9 c) 16 d) 25	
50	The area of square of side length 3 cm is .....cm^2. a) 4 b) 9 c) 16 d) 25	
51	The sum of the measures of any two consecutive angles in a parallelogram equals ..... a) 90° b) 180° c) 270° d) 360°	
52	The quadrilateral in which only two opposite sides are parallel is called..... a) square b) rectangle c) parallelogram d) trapezium	
53	Each two consecutive angles in a parallelogram are ..... angles. a) accumulative b) supplementary c) equal d) complementary	
54	The rectangle is a parallelogram each of its angles is ..... a) obtuse. b) acute. c) right. d) Straight.	
55	In the.....the two diagonals are perpendicular and not equal in length. a) square b) rhombus c) rectangle d) parallelogram	
56	In a parallelogram if the adjacent sides are equal in length , then the shape is a) square. b) rhombus. c) rectangle. d) trapezium.	
57	The two diagonals are equal in length and perpendicular in ..... a) square b) rectangle c) rhombus d) parallelogram	
58	The rectangle of perpendicular diagonals is ..... a) a parallelogram. b) a square. c) a rhombus. d) a trapezium.	
59	The rhombus of diagonals equal in length is..... . a) a square. b) a rectangle. c) a trapezium.	

Choose the correct answer those given:

(1) $\left(\frac{1}{3}\right)^4$ = ...

(a) $\frac{1}{27}$ (b) $\frac{4}{81}$ (c) $\frac{1}{81}$ (d) $\frac{4}{27}$

(2) The multiplicative inverse of the number $\left(-\frac{3}{4}\right)^{zero}$ is .....

(a) – 1 (b) $-\frac{4}{3}$ (c) $\frac{4}{3}$ (d) 1

(3) The additive inverse of the number $(-2)^3$ = ...

(a) 8 (b) – 8 (c) – 4 (d) 6

(4) $\left(-1\frac{1}{4}\right)^3$ = ...

(a) $\frac{125}{64}$ (b) $-\frac{125}{64}$ (c) $\frac{25}{16}$ (d) $-\frac{1}{64}$

(5) If a = b , then $\left(\frac{5}{7}\right)^{a-b}$ = ...

(a) $\frac{5}{7}$ (b) $\frac{7}{5}$ (c) 1 (d) zero

(6) If $x = \frac{2}{3}$, y = 2 ,then x^y = ...

(a) $\frac{4}{9}$ (b) $-\frac{4}{9}$ (c) $\frac{8}{27}$ (d) $-\frac{8}{27}$

(7) $5^2 \times 5^3$ = ...

(a) 5^6 (b) 5^5 (c) 5 (d) 5^{32}

(8) $(a^2)^4$ = ...

(a) a^6 (b) a^8 (c) a^2 (d) a^4

(9) $\frac{(y^5)^2}{y^3}$ = ..., y ≠ 0

(a) y^4 (b) y^{13} (c) y^{10} (d) y^7

(10) The additive inverse of the number $(-\frac{3}{4})^2$= .....

(a) $\frac{9}{16}$ (b) $-\frac{9}{16}$ (c) $-\frac{3}{4}$ (d) $\frac{3}{4}$

(11) The quarter of the number 4^{20} =.....

(a) 4^5 (b) 4^{10} (c) 4^{19} (d) 2^{10}

(12) $2^5 + 2^5 + 2^5 + 2^5$ = ...

(a) 8^5 (b) 2^{10} (c) 2^7 (d) 2^{20}

(13) If $x^{-1} = \frac{1}{2}$, then x =.....

(a $\frac{1}{2}$ (b) $-\frac{1}{2}$ (c) 2 (d) -2

(14) $\frac{(-2x^2y)^3}{(-4xy^2)^2}$ = ..., $xy \neq 0$

(a) $\frac{x^3}{2y}$ (b) $-\frac{x^4}{2y}$ (c) $\frac{x^5}{2y^2}$ (d) $\frac{x}{y}$

(15) $\frac{(7\times y^{-2})^{zer0}}{5^{zer_0}x^{-3}y^2}$ =....., $xy \neq 0$

(a) $\frac{y2}{x^3}$ (b) x^3y^2 (c) $\frac{1}{x^3y^2}$ (d) $\frac{x^3}{y2}$

(16) $(3^2)^5$ = ...

(a) 3^5 (b) 3^3 (c) 3^{10} (d) 3^7

(17) If $x = \frac{1}{2}, y = \frac{1}{4}, then\ x^2 + y$ = ...

(a) $\frac{3}{4}$ (b) $\frac{1}{2}$ (c) $\frac{9}{16}$ (d) 1

(18) $\left(\frac{m^2}{n^{-3}}\right)^{-1} \times \left(\frac{3m^{-2}}{n^{-2}}\right)^{-2}$ =....., $mn \neq 0$

(a) $\frac{9m^2}{n^7}$ (b) $\frac{m^2}{9n^7}$ (c) $\frac{m^2}{9n}$ (d) $\frac{9m^6}{n}$

(19) The multiplicative inverse of the number $\left(\frac{2}{5}\right)^0$ =.....

(a) $\frac{5}{2}$ (b) $-\frac{2}{5}$ (c) 1 (d) 0

(20) The additive inverse of the number $(-3)^0$ is.....

(a) 1 (b) – 3 (c) 3 (d) $-(3)^0$

(21) The multiplicative inverse of the number $(-1)^3$ is .....

(a) $(-1)^3$ **(b) $(-1)^2$** **(c) 1^3** **(d) 1^2**

(22) The additive inverse of the number $\left(-\frac{2}{5}\right)^2$ is .....

(a) $\frac{4}{25}$ **(b) $-\frac{4}{25}$** **(c) $\frac{25}{4}$** **(d) $-\frac{25}{4}$**

(23) $\left(\frac{1}{4}\right)^0 + \frac{1}{4} =$ .....

(a) $\frac{1}{4}$ **(b) $\frac{3}{4}$** **(c) $\frac{5}{4}$** **(d) $\frac{2}{4}$**

(24) $\left(\frac{5}{3}\right)^2 \times \left(\frac{3}{5}\right)^0 =$ .....

(a) $\frac{5}{3}$ **(b) $\frac{25}{9}$** **(c) 0** **(d) 1**

(25) If $x = y$,then $\left(\frac{3}{5}\right)^{x-y} =$ .....

(a) $\frac{3}{5}$ **(b) $\frac{5}{3}$** **(c) 1** **(d) 0**

(26) $\left(\frac{a}{b}\right)^2 \times \frac{b^2}{a^2} =$ .....(where ab $\neq$ 0)

(a) ab **(b) $\left(\frac{a}{b}\right)^4$** **(c) $(ab)^0$** **(d) $\frac{a}{b}$**

(27) If $x = -\frac{1}{2}$ and y = 3 ,then x^y =.....

(a) $\frac{1}{8}$ **(b) $-\frac{1}{8}$** **(c) $\frac{1}{6}$** **(d) $-\frac{1}{6}$**

(28) If : $y^{26} + y^{27} = 0$,then y = ...

(a) 1 **(b) -1** **(c) 2** **(d) -2**

(29) $3^2 \times 3^5 =$ .....

(a) 3^7 (b) 3^3 (c) 3^{10} (d) 3^{25}

(30) $5^2 + 5^2 =$ .....

(a) 10^2 (b) 10^4 (c) 5^4 (d) 50

(31) $3^5 \times 2^5 =$ .....

(a) 5^{10} (b) 6^{10} (c) 6^5 (d) 6^{25}

(32) $(5a)^0 =$....., $a \neq 0$

(a) 5 (b) a (c) 5a (d) 1

(33) $3(^{2^3}) =$.....

(a) 3^6 (b) 3^5 (c) 3^8 (d) 3^{23}

(34) $(5^2)^3 =$.....

(a) 5^6 (b) 5^5 (c) 5^{23} (d) 5

(35) $4^x + 4^x + 4^x + 4^x =$.....

(a) 4^{x+4} (b) 4^{4x} (c) 4^{x+1} (d) $4x^4$

(36) $\frac{(3^2)^5}{(3^5)^2} =$ .....

(a) 3^{10} (b) 3^{52} (c) 3^{25} (d) 1

(37) $\frac{(x^2)^3}{x^3} =$..... , $x \neq 0$

(a) x^6 (b) x^2 (c) x^3 (d) x

(38) $(2\,y)^3 =$.....

(a) $2\,y^3$ (b) $8\,y$ (c) $8\,y^3$ (d) $23\,y$

(39) $(b^3)^4$ =.....

(a) b^{34} (b) b^7 (c) $b^4 \times b^4 \times b^4$ (d) $b^3 \times b^3 \times b^3$

(40) If $a^{-1} = \frac{2}{3}$, then a = ...

(a) $-\frac{2}{3}$ (b) $\frac{3}{2}$ (c) $-\frac{3}{2}$ (d) 1

(41) If $a = 7^x$ and $b = 7^{-x}$, then $a \times b$ =.....

(a) 7^{2x} (b) 49^{2x} (c) 1 (d) 0

(42) $\frac{5^x}{5^{-y}}$ = ...

(a) $5(x \div y)$ (b) 5^{x-y} (c) 5^{x+y} (d) $-\frac{x}{y}$

(43) $\frac{6a^2x^4}{2a^3x^3}$ = ...

(a) $3\,a\,x$ (b) $3a^5x^7$ (c) $\frac{3x}{a}$ (d) $\frac{3}{ax}$

(44) $\frac{(-2s^2t)^3}{(-4st^2)^2}$ = ...

(a) $-\frac{s^3}{2t}$ (b) $-\frac{s^4}{2t}$ (c) $\frac{s^5}{2t^2}$ (d) $\frac{s^4}{t}$

(45) $\frac{(2ab^{-2})^0}{3^0a^{-2}b}$ = ...

(a) $\frac{a^3}{3b^3}$ (b) a^2 (c) 1 (d) $\frac{a^2}{b}$

(46) If $a^x = 2$ and $a^{-y} = 3$, then a^{x-y} = ...

(a) 1 (b) – 1 (c) $\frac{2}{3}$ (d) 6

(47) If $xy^{-1} = \frac{1}{2}$, then $\frac{y}{x}$ = ...

(a) $\frac{1}{2}$ (b) $-\frac{1}{2}$ (c) 1 (d) 2

(48) $3^{-1} + 3^{-1} + 3^{-1} =$ .....

(a) 3^{-3} (b) 3^{3} (c) 9^{-3} (d) 1

(49) The multiplicative inverse of 5^{-1} is .....

(a) $\frac{1}{5}$ (b) 5 (c) -5 (d) $-\frac{1}{5}$

(50) $\left(\frac{3}{5}\right)^{2} x \left(\frac{5}{3}\right)^{-2}$ = ...

(a) $\left(\frac{3}{5}\right)^{4}$ (b) 1 (c) $\left(\frac{3}{5}\right)^{-4}$ (d) 0

(51) The measure of the interior angle of the regular octagon equals...

(a) 1080° (b) 180° (c) 135° (d) 108°

(52) The sum of measures of the exterior angles of a triangle =.....

(a) 180° (b) 360° (c) 90° (d) 100°

(53) If the measure of an interior angle of a regular polygon = 120° then the number of its sides = ...

(a) 3 (b) 4 (c) 5 (d) 6

(54) The two vertically opposite angles are .....

(a) complementary. (b) supplementary.
(c) adjacent. (d) equal in measure.

(55) The sum of measures of the interior angles of a polygon of n sides =.....

(a) $n \times 180°$ (b) $(n-2)180°$ (c) $\frac{(n-2)\times 180^{0}}{2}$ (d) $\frac{(n-2)\times 180^{0}}{2n}$

(56) The measure of the interior angle of a regular polygon is of n sides equals .....

(a) $\frac{(n-2)\times 90^o}{n}$ (b) $\frac{(n-2)\times 180^0}{2}$ (c) $\frac{(n-2)\times 180^0}{n}$ (d) $180° x (n-1)$

(57) The measure of the interior angle of the regular polygon of 10 sides equals.....

(a) 72° (b) 108° (c) 144° (d)150°

(58) The measure of the interior angle of a regular polygon of 18 sides equals .....

(a) 130° (b) 140° (c) 150° (d) 160°

(59) If the measure of an interior angle of a regular polygon is 135° then the number of its sides is .....

(a) 6 (b) 4 (c) 7 (d) 8

(60) The sum of measures of the exterior angles of the triangle equals .....

(a) 90° (b) 180° (c) 360° (d) 720°

(61) In the quadrilateral ABCD , if m (∠A) = 2m (∠B) = m (∠ C) = 96°Then m (∠ D) = ...

(a) 90° (b) 48° (c) 120° (d) 144°

(62) The sum of measures of the interior angles of the quadrilateral = ...°

(a) 300 (b) 360 (c) 520 (d) 900

(63) The sum of measures of the interior angles of the pentagon = ...°

(a) 540 (b) 360 (c) 135 (d) 108

(64) The sum of measures of the interior angles of the hexagon = ...°

(a) 540 (b) 720 (c) 900 (d) 1080

(65) The sum of measures of the interior angles of the heptagon= ..... °

(a) 720 (b) 900 (c) 360 (d) 100

(66) The sum of measures of the exterior angles of the hexagon equals .....

(a) 520 (b) 360 (c) 900 (d)130

(67) If the perimeter of a regular hexagon is 30 cm. ,then its side length = ... cm. an the measure of each interior angle in it = ...

(a) 2,100 (b) 5,120 (c) 6,130

(68) If the perimeter of a regular polygon = 80 cm. and its side length = 10 cm. ,then the measure of each interior angle in it = ...°

(a) 145 (b) 135 (c) 130 (d) 140

Choose the correct answer those given:

(1) $\left(\frac{1}{3}\right)^4 =$ .....

(a) $\frac{1}{27}$ (b) $\frac{4}{81}$ (c) $\frac{1}{81}$ (d) $\frac{4}{27}$

(2) The multiplicative inverse of the number $\left(-\frac{3}{4}\right)^{zero}$ is .....

(a) -1 (b) $-\frac{4}{3}$ (c) $\frac{4}{3}$ (d) 1

(3) The additive inverse of the number $(-2)^3 =$ .....

(a) 8 (b) -8 (c) -4 (d) 6

(4) $\left(-1\frac{1}{4}\right)^3 =$ .....

(a) $\frac{125}{64}$ (b) $-\frac{125}{64}$ (c) $\frac{25}{16}$ (d) $-\frac{1}{64}$

(5) If a = b , then $\left(\frac{5}{7}\right)^{a-b} =$ .....

(a) $\frac{5}{7}$ (b) $\frac{7}{5}$ (c) 1 (d) zero

(6) If $x = \frac{2}{3}$, y = 2 ,then $x^y =$ .....

(a) $\frac{4}{9}$ (b) $-\frac{4}{9}$ (c) $\frac{8}{27}$ (d) $-\frac{8}{27}$

(7) $5^2 \times 5^3 =$ .....

(a) 5^6 (b) 5^5 (c) 5 (d) 5^{32}

(8) $(a^2)^4 =$ .....

(a) a^6 (b) a^8 (c) a^2 (d) a^4

(9) $\frac{(y^5)^2}{y^3} =$ ....., $y \neq 0$

(a) y^4 (b) y^{13} (c) y^{10} (d) y^7

(10) The additive inverse of the number $\left(-\frac{3}{4}\right)^2 =$ .....

(a) $\frac{9}{16}$ (b) $-\frac{9}{16}$ (c) $-\frac{3}{4}$ (d) $\frac{3}{4}$

(11) The quarter of the number 4^{20} =.....

(a) 4^5 (b) 4^{10} (c) 4^{19} (d) 2^{10}

(12) $2^5 + 2^5 + 2^5 + 2^5$ = ...

(a) 8^5 (b) 2^{10} (c) 2^7 (d) 2^{20}

(13) If $x^{-1} = \frac{1}{2}$, then x =.....

(a $\frac{1}{2}$ (b) $-\frac{1}{2}$ (c) 2 (d) -2

(14) $\frac{(-2x^2y)^3}{(-4xy^2)^2}$ = ..., $xy \neq 0$

(a) $\frac{x^3}{2y}$ (b) $-\frac{x^4}{2y}$ (c) $\frac{x^5}{2y^2}$ (d) $\frac{x}{y}$

(15) $\frac{(7\times y^{-2})^{zer0}}{5^{zer_0}x^{-3}y^2}$ =....., $xy \neq 0$

(a) $\frac{y2}{x^3}$ (b) x^3y^2 (c) $\frac{1}{x^3y^2}$ (d) $\frac{x^3}{y2}$

(16) $(3^2)^5$ = ...

(a) 3^5 (b) 3^3 (c) 3^{10} (d) 3^7

(17) If $x = \frac{1}{2}, y = \frac{1}{4}$, then $x^2 + y$ = ...

(a) $\frac{3}{4}$ (b) $\frac{1}{2}$ (c) $\frac{9}{16}$ (d) 1

(18) $\left(\frac{m^2}{n^{-3}}\right)^{-1} \times \left(\frac{3m^{-2}}{n^{-2}}\right)^{-2}$ =....., $mn \neq 0$

(a) $\frac{9m^2}{n^7}$ (b) $\frac{m^2}{9n^7}$ (c) $\frac{m^2}{9n}$ (d) $\frac{9m^6}{n}$

(19) The multiplicative inverse of the number $\left(\frac{2}{5}\right)^0$ =.....

(a) $\frac{5}{2}$ (b) $-\frac{2}{5}$ (c) 1 (d) 0

(20) The additive inverse of the number $(-3)^0$ is.....

(a) 1 (b) -3 (c) 3 (d) $-(3)^0$

(21) The multiplicative inverse of the number $(-1)^3$ is .....

(a) $(-1)^3$ (b) $(-1)^2$ (c) 1^3 (d) 1^2

(22) The additive inverse of the number $\left(-\frac{2}{5}\right)^2$ is .....

(a) $\frac{4}{25}$ (b) $-\frac{4}{25}$ (c) $\frac{25}{4}$ (d) $-\frac{25}{4}$

(23) $\left(\frac{1}{4}\right)^0 + \frac{1}{4} =$ .....

(a) $\frac{1}{4}$ (b) $\frac{3}{4}$ (c) $\frac{5}{4}$ (d) $\frac{2}{4}$

(24) $\left(\frac{5}{3}\right)^2 \times \left(\frac{3}{5}\right)^0 =$ .....

(a) $\frac{5}{3}$ (b) $\frac{25}{9}$ (c) 0 (d) 1

(25) If $x = y$,then $\left(\frac{3}{5}\right)^{x-y} =$ .....

(a) $\frac{3}{5}$ (b) $\frac{5}{3}$ (c) 1 (d) 0

(26) $\left(\frac{a}{b}\right)^2 \times \frac{b^2}{a^2} =$ .....(where ab $\neq$ 0)

(a) ab (b) $\left(\frac{a}{b}\right)^4$ (c) $(ab)^0$ (d) $\frac{a}{b}$

(27) If $x = -\frac{1}{2}$ and y = 3 ,then x^y =.....

(a) $\frac{1}{8}$ (b) $-\frac{1}{8}$ (c) $\frac{1}{6}$ (d) $-\frac{1}{6}$

(28) If : $y^{26} + y^{27} = 0$,then y = ...

(a) 1 (b) -1 (c) 2 (d) -2

(29) $3^2 \times 3^5 =$ .....

(a) 3^7 (b) 3^3 (c) 3^{10} (d) 3^{25}

(30) $5^2 + 5^2 =$ .....

(a) 10^2 (b) 10^4 (c) 5^4 (d) 50

(31) $3^5 \times 2^5 =$ .....

(a) 5^{10} (b) 6^{10} (c) 6^5 (d) 6^{25}

(32) $(5a)^0 =$....., $a \neq 0$

(a) 5 (b) a (c) 5a (d) 1

(33) $3(^{2^3}) =$.....

(a) 3^6 (b) 3^5 (c) 3^8 (d) 3^{23}

(34) $(5^2)^3 =$.....

(a) 5^6 (b) 5^5 (c) 5^{23} (d) 5

(35) $4^x + 4^x + 4^x + 4^x =$.....

(a) 4^{x+4} (b) 4^{4x} (c) 4^{x+1} (d) $4x^4$

(36) $\frac{(3^2)^5}{(3^5)^2} =$.....

(a) 3^{10} (b) 3^{52} (c) 3^{25} (d) 1

(37) $\frac{(x^2)^3}{x^3} =$....., $x \neq 0$

(a) x^6 (b) x^2 (c) x^3 (d) x

(38) $(2\,y)^3 =$.....

(a) $2\,y^3$ (b) $8\,y$ (c) $8\,y^3$ (d) $23\,y$

(39) $(b^3)^4$ =.....

(a) b^{34} (b) b^7 (c) $b^4 \times b^4 \times b^4$ (d) $b^3 \times b^3 \times b^3$

(40) If $a^{-1} = \frac{2}{3}$, then a = ...

(a) $-\frac{2}{3}$ (b) $\frac{3}{2}$ (c) $-\frac{3}{2}$ (d) 1

(41) If $a = 7^x$ and $b = 7^{-x}$, then $a \times b$ =.....

(a) 7^{2x} (b) 49^{2x} (c) 1 (d) 0

(42) $\frac{5^x}{5^{-y}}$ = ...

(a) $5(x \div y)$ (b) 5^{x-y} (c) 5^{x+y} (d) $-\frac{x}{y}$

(43) $\frac{6a^2x^4}{2a^3x^3}$ = ...

(a) $3\,a\,x$ (b) $3a^5x^7$ (c) $\frac{3x}{a}$ (d) $\frac{3}{ax}$

(44) $\frac{(-2s^2t)^3}{(-4st^2)^2}$ = ...

(a) $-\frac{s^3}{2t}$ (b) $-\frac{s^4}{2t}$ (c) $\frac{s^5}{2t^2}$ (d) $\frac{s^4}{t}$

(45) $\frac{(2ab^{-2})^0}{3^0a^{-2}b}$ = ...

(a) $\frac{a^3}{3b^3}$ (b) a^2 (c) 1 (d) $\frac{a^2}{b}$

(46) If $a^x = 2$ and $a^{-y} = 3$, then a^{x-y} = ...

(a) 1 (b) -1 (c) $\frac{2}{3}$ (d) 6

(47) If $xy^{-1} = \frac{1}{2}$, then $\frac{y}{x}$ = ...

(a) $\frac{1}{2}$ (b) $-\frac{1}{2}$ (c) 1 (d) 2

(48) $3^{-1} + 3^{-1} + 3^{-1} =$ .....

(a) 3^{-3} (b) 3^{3} (c) 9^{-3} (d) 1

(49) The multiplicative inverse of 5^{-1} is .....

(a) $\frac{1}{5}$ (b) 5 (c) -5 (d) $-\frac{1}{5}$

(50) $\left(\frac{3}{5}\right)^{2} x \left(\frac{5}{3}\right)^{-2} =$ .....

(a) $\left(\frac{3}{5}\right)^{4}$ (b) 1 (c) $\left(\frac{3}{5}\right)^{-4}$ (d) 0

(51) The measure of the interior angle of the regular octagon equals...

(a) $1080°$ (b) $180°$ (c) $135°$ (d) $108°$

(52) The sum of measures of the exterior angles of a triangle =.....

(a) $180°$ (b) $360°$ (c) $90°$ (d) $100°$

(53) If the measure of an interior angle of a regular polygon = $120°$ then the number of its sides = ...

(a) 3 (b) 4 (c) 5 (d) 6

(54) The two vertically opposite angles are .....

(a) complementary. (b) supplementary.

(c) adjacent. (d) equal in measure.

(55) The sum of measures of the interior angles of a polygon of n sides =.....

(a) $n \times 180^{\circ}$ (b) $(n-2)180°$ (c) $\frac{(n-2)\times 180^{0}}{2}$ (d) $\frac{(n-2)\times 180^{0}}{2n}$

(56) The measure of the interior angle of a regular polygon is of n sides equals .....

(a) $\frac{(n-2)\times 90^0}{n}$ (b) $\frac{(n-2)\times 180^0}{2}$ (c) $\frac{(n-2)\times 180^0}{n}$ (d) $180^\circ x\,(n-1)$

(57) The measure of the interior angle of the regular polygon of 10 sides equals.....

(a) 72° (b) 108° (c) 144° (d)150°

(58) The measure of the interior angle of a regular polygon of 18 sides equals .....

(a) 130° (b) 140° (c) 150° (d) 160°

(59) If the measure of an interior angle of a regular polygon is 135° then the number of its sides is .....

(a) 6 (b) 4 (c) 7 (d) 8

(60) The sum of measures of the exterior angles of the triangle equals .....

(a) 90° (b) 180° (c) 360° (d) 720°

(61) In the quadrilateral ABCD , if m (∠A) = 2m (∠B) = m (∠ C) = 96°Then m (∠ D) = ...

(a) 90° (b) 48° (c) 120° (d) 144°

(62) The sum of measures of the interior angles of the quadrilateral = ...°

(a) 300 (b) 360 (c) 520 (d) 900

(63) The sum of measures of the interior angles of the pentagon = ...°

(a) 540 (b) 360 (c) 135 (d) 108

(64) The sum of measures of the interior angles of the hexagon = ...°

(a) 540 (b) 720 (c) 900 (d) 1080

(65) The sum of measures of the interior angles of the heptagon= .....°

(a) 720 (b) 900 (c) 360 (d) 100

(66) The sum of measures of the exterior angles of the hexagon equals .....

(a) 520 (b) 360 (c) 900 (d)130

(67) If the perimeter of a regular hexagon is 30 cm. ,then its side length = ... cm. an the measure of each interior angle in it = ...

(a) 2,100 (b) 5,120 (c) 6,130

(68) If the perimeter of a regular polygon = 80 cm. and its side length = 10 cm. ,then the measure of each interior angle in it = ...°

(a) 145 (b) 135 (c) 130 (d) 140

Choose the correct Answer:

1.	$(7X)^{zero}$ = ... where $X \neq$ zero A) 5 B) 6 C) 0 D) 1
2.	$(\frac{-4}{5})^0$ = ... A) 5 B) 6 C) – 1 D) 1
3.	$-(\frac{-4}{5})^0$ = ... A) 5 B) 6 C) – 1 D) 1
4.	$-[\frac{2ab^3}{3a^5b}]^{zero}$ = ... A) 1 B) – 1 C) 2 D) 3
5.	$3\ X^0$ ..... Where $x \neq 0$ A) 1 B) 0 C) 3 D) 4
6.	$7\ X^0$ ..... A) 1 B) 7 C) 3 D) 4
7.	If : X = y , then $(\frac{4}{9})^{X-y}$ = ... A) 0 B) 1 C) 4 D) 9
8.	Half the number 2^{10} = ... A) 2^9 B) 2^7 C) 2^6 D) 2^{10}
9.	$3^6 + 3^6 + 3^6 = 3^{\cdots\cdots}$ A) 18 B) 15 C) 6 D) 7
10.	$4^7 + 4^7 + 4^7 + 4^7 = 4^{\cdots\cdots}$ A) 21 B) 6 C) 7 D) 8
11.	$4^X + 4^X + 4^X + 4^X$ = ... A) 4^X B) 4^{X+1} C) 16^X D) $4X^4$
12.	$(2^3)^2 = 2^{\cdots\cdots}$ A) 6 B) 8 C) 10 D) 12

13. Half the number 2^8 = ...

A) 2^9 B) 2^7 C) 2^6 D) 2^{10}

14. Half the number 2^{11} = ...

A) 2^9 B) 2^7 C) 2^6 D) 2^{10}

15. $\frac{1}{3}$ of 3^9 = ...

A) 3^5 B) 3^3 C) 3^8 D) 3^4

16. Quarter of 4^{16} = $4^{\cdots\cdots}$ .....

A) 15 B) 20 C) 19 D) 10

17. The half of 4^2 = $2^{\cdots\cdots}$ .....

A) 5 B) 3 C) 19 D) 7

18. Twice the number 2^3 = $2^{\cdots\cdots}$ .....

A) 6 B) 4 C) 19 D) 5

19. Thrice the number 3^5 = $3^{\cdots\cdots}$ .....

A) 15 B) 6 C) 19 D) 8

20. The additive inverse of $\frac{3}{4}$ = ...

A) $\frac{3}{4}$ B) $\frac{4}{3}$ C) $-\frac{3}{4}$ D) $-\frac{4}{3}$

21. The additive inverse of $\frac{1}{2}$ = ...

A) $\frac{1}{2}$ B) 2 C) $-\frac{1}{2}$ D) -2

22. The additive inverse of $(\frac{-1}{5})^0$ = ...

A) $\frac{1}{5}$ B) 1 C) $-\frac{1}{5}$ D) -1

23. The additive inverse of $(\frac{-1}{2})^2$ = ...

A) $-\frac{1}{4}$ B) $-\frac{4}{25}$ C) $-\frac{4}{9}$ D) $-\frac{1}{9}$

24. The additive inverse of $(\frac{-3}{5})^3$ = ...

A) $\frac{27}{125}$ B) $\frac{8}{125}$ C) $-\frac{8}{125}$ D) $-\frac{27}{125}$

25. The multiplicative inverse of $\frac{3}{4}$ = ...

A) $\frac{3}{4}$ B) $\frac{4}{3}$ C) $-\frac{3}{4}$ D) $-\frac{4}{3}$

26. The multiplicative inverse of $\frac{1}{2}$ = ...

A) $\frac{1}{2}$ B) 2 C) $-\frac{1}{2}$ D) – 2

27. The multiplicative inverse of $(\frac{-1}{5})^0$ = ...

A) $\frac{1}{5}$ B) 1 C) $-\frac{1}{5}$ D) – 1

28. The multiplicative inverse of $(\frac{-2}{3})^3$ = ...

A) $-\frac{8}{27}$ B) $\frac{27}{8}$ C) $-\frac{27}{8}$ D) $\frac{8}{27}$

29. The multiplicative inverse of $(\frac{-1}{2})^2$ = ...

A) $(\frac{1}{2})^2$ B) $-(\frac{1}{2})^2$ C) 2^2 D) -2^2

30. $(\frac{2}{-3})^2$ = ...

A) $\frac{4}{9}$ B) $\frac{9}{4}$ C) $\frac{25}{9}$ D) $\frac{9}{25}$

31. $(-\frac{2}{3})^2$ = ...

A) $\frac{4}{9}$ B) $\frac{9}{4}$ C) $\frac{25}{9}$ D) $\frac{9}{25}$

32. $(\frac{-3}{2})^2$ = ...

A) $\frac{4}{9}$ B) $\frac{9}{4}$ C) $\frac{25}{9}$ D) $\frac{9}{25}$

33. $(-\frac{2}{5})^3 =$ .....

A) $-\frac{8}{27}$ B) $-\frac{27}{8}$ C) $-\frac{27}{125}$ D) $-\frac{8}{125}$

34. $2^3 \times 2^7 = 2^{\cdots\cdots}$

A) 3 B) 5 C) 8 D) 10

35. $3^2 \times 3^3 = 3^{\cdots\cdots}$

A) 3 B) 5 C) 8 D) 10

36. $X^7 \times X^3 = X^{\cdots\cdots}$

A) 3 B) 5 C) 8 D) 10

37. $3^2 \times 3 =$ .....

A) 9 B) 27 C) 81 D) 1

38. $2^5 \times 3^5 =$ .....

A) 5^5 B) 6^5 C) 6^{14} D) 6^{25}

39. $2^9 \times 3^9 =$ .....

A) 5^9 B) 6^9 C) 6^{18} D) 6^{81}

40. $2^7 \div 2^3 =$ .....

A) 2^3 B) 2^2 C) 3^2 D) 16

41. $(\frac{1}{2})^5 \div (\frac{1}{2})^3 =$ .....

A) $\frac{1}{2}$ B) $\frac{1}{4}$ C) $\frac{1}{8}$ D) $\frac{1}{16}$

42. $(\frac{-3}{5})^{11} \div (\frac{3}{5})^9 =$ .....

A) $\frac{9}{25}$ B) $-\frac{9}{25}$ C) $\pm\frac{9}{25}$ D) $\frac{3}{5}$

43. $(\frac{-3}{5})^3 \div (\frac{3}{5}) =$ .....

A) $\frac{9}{25}$ B) $-\frac{9}{25}$ C) $\pm\frac{9}{25}$ D) $\frac{3}{5}$

44. $(a^{-1})^{-3} = a^{\cdots\cdots}$

A) 3 B) 4 C) 6 D) 8

45. $(a^{-2})^{-3} = a^{\cdots\cdots}$

A) 3 B) 4 C) 6 D) 8

46. $(a^{-1})^{3} = a^{\cdots\cdots}$

A) – 3 B) – 4 C) – 6 D) – 8

47. $3^{6} \times 3^{-5} =$ .....

A) 9 B) 27 C) 81 D) 3

48. $3^{5} \times 3^{-5} =$ .....

A) 9 B) 1 C) 81 D) 3

49. $5^{-1} =$ .....

A) $\frac{1}{7}$ B) $\frac{1}{5}$ C) $\frac{1}{3}$ D) $\frac{1}{2}$

50. $2^{-1} =$ .....

A) $\frac{1}{7}$ B) $\frac{1}{5}$ C) $\frac{1}{3}$ D) $\frac{1}{2}$

51. $10^{-3} = \frac{1}{\cdots\cdots}$ .....

A) 10 B) 100 C) 1000 D) 10 000

52. $(\frac{1}{7})^{-1} =$ .....

A) 5 B) 7 C) 3 D) 2

53. $(\frac{-1}{7})^{-1} =$ .....

A) – 5 B) – 7 C) – 3 D) – 2

54. $(\frac{1}{7})^{-2} =$ .....

A) 49 B) 7 C) 3 D) 2

55. $(-\frac{1}{3})^{-2} =$ .....

A) 9 B) – 27 C) 81 D) – 243

56. $(\frac{2}{3})^{-2} =$ .....

A) $\frac{9}{4}$ B) $\frac{27}{8}$ C) $\frac{81}{16}$ D) $\frac{243}{32}$

57. $3\ a^{-1}$ = ...

A) $-3X$ B) $3X$ C) $\frac{3}{a}$ D) $\frac{2}{X}$

58. $5\ y^{-1}$ = ...

A) $-5X$ B) $\frac{5}{y}$ C) $\frac{1}{5y}$ D) $\frac{5}{X}$

59. $(\frac{1}{5})^{-2} = (.....)^2$

A) 7 B) 5 C) 3 D) 2

60. $(\frac{1}{2})^{-2} = (.....)^2$

A) 7 B) 5 C) 3 D) 2

61. If: $a = -3$, then $a^{-3} = \frac{1}{.....}$

A) 9 B) -9 C) 27 D) -27

62. If: $a = -2$, then $a^{-3} = \frac{1}{.....}$ .....

A) 4 B) -4 C) 8 D) -8

63. The multiplicative inverse of the number 2^{-1} is .....

A) 2 B) -2 C) $\frac{1}{2}$ D) $-\frac{1}{2}$

64. $(5X^{-1})^{-1}$ = ...

A) $\frac{a}{2}$ B) $\frac{a}{3}$ C) $\frac{X}{5}$ D) $\frac{X}{7}$

65. The sum of measures of accumulative angles at a point is .....

(a) 360° (b) 180° (c) 90° (d) 270°

66. The two bisectors of two adjacent supplementary angles included an angle of measure .....°

(a) 180 (b) 45 (c) 90 (d) 0

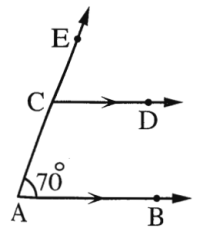
67. The angle whose measure 90° is ..... angle.

(a) acute (b) right (c) obtuse (d) straight

68. The acute angle supplements ..... angle.

(a) acute (b) right (c) obtuse (d) straight

69. **In the opposite figure :**

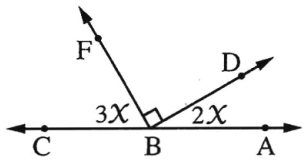


m (∠ DCE) = ...°

(a) 70 (b) 110

(c) 20 (d) 140

70. **In the opposite figure :** B ∈ $\overleftrightarrow{AC}$ and



m (∠ DBF) = 90° , then m (∠ ABD) = ...

(a) 180° (b) 90°

(c) 36° (d) 45°

71. The pentagon has ..... sides.

(a) 3 (b) 4 (c) 5 (d) 6

72. The number of the diagonals of a pentagon is .....

(a) 3 (b) 5 (c) 4 (d) 2

73. The polygon of 6 sides is called .....

(a) pentagon. (b) hexagon. (c) octagon. (d) heptagon.

74. The sum of the measures of the exterior angles of a polygon = ...

(a) 180° (b) 360° (c) 540° (d) 720°

75. The sum of measures of the exterior angles of a triangle is .....

(a) 90° (b) 180° (c) 360° (d) non

76. The sum of the measures of the interior angles of a triangle is .....°

(a) 180 (b) 90 (c) 270 (d) 360

77. The sum of the measures of interior angles of a pentagon is .....

(a) 360° (b) 450° (c) 540° (d) 720°

78. The sum of measures of the interior angles of an octagon = ...

(a) 540° (b) 720° (c) 1080° (d) 900°

79. The measure of the exterior angle of the equilateral triangle = ...°

(a) 30 (b) 45 (c) 60 (d) 120

80. The measure of the interior angle of a regular pentagon = ...°

(a) 140 (b) 108 (c) 120 (d) 135

81. How many sides has a regular polygon if the measure of each interior angle of it is 120° ?

(a) 5 (b) 6 (c) 7 (d) 8

82. The measure of an interior angle of regular hexagon is .....
(a) 60° (b) 90° (c) 120° (d) 108°

83. The measure of each angle of a regular octagon is .....°
(a) 135 (b) 180 (c) 128 $\frac{4}{7}$ (d) 120

84. The number of diagonals of quadrilateral is .....
(a) 2 (b) 3 (c) 4 (d) 5

85. The sum of measures of accumulative angles at a point is .....
(a) 360° (b) 180° (c) 90° (d) 270°

86. The angle whose measure 90° is ..... angle.
(a) acute (b) right (c) obtuse (d) straight

87. The acute angle supplements ..... angle.
(a) acute (b) right (c) obtuse (d) straight

88. The quadrilateral in which only two opposite sides are parallel is called .....
(a) square (b) rectangle (c) parallelogram (d) trapezium

89. Each two consecutive angles in a parallelogram are ..... angles.
(a) accumulative (b) supplementary (c) equal (d) complementary

90. The sum of the measures of any two consecutive angles in a parallelogram equals .....
(a) 90° (b) 180° (c) 270° (d) 360°

91. If ABCD is a parallelogram , then m (∠ A) = m (∠ .....)
(a) B (b) C (c) D (d) nothing

92. ABCD is a parallelogram in which m (∠ A) = 50° , then m (∠ B) = ...°
(a) 130 (b) 40 (c) 20 (d) 50

93. ABCD is a parallelogram in which m (∠ A) = 55° , then m (∠ B) = ...
(a) 35° (b) 125° (c) 55° (d) 180°

94. ABCD is a parallelogram in which m (∠ A) = 60° , then angle m (∠ C) = ...
(a) 60° (b) 180° (c) 120° (d) 90°

95. ABCD is a parallelogram in which m (∠ A) = 60° , then m (∠ B) = ...°
(a) 120 (b) 60 (c) 180 (d) 90

96.	ABCD is a parallelogram in which m (∠ A) = 70° , then m (∠ B) = ... (a) 70° (b) 110° (c) 140° (d) 210°
97.	ABCD is a parallelogram if m (∠ A) = 130° , then m (∠ B) = ... (a) 130° (b) 50° (c) 40° (d) 65°
98.	ABCD is a parallelogram if m (∠ A) = 130° , then m (∠ C) = ...° (a) 130 (b) 50 (c) 40 (d) 65
99.	ABCD is a parallelogram if m (∠ C) = 130° , then m (∠ A) = ...° (a) 130 (b) 50 (c) 65 (d) 40
100.	ABCD is a parallelogram in which m (∠ A) + m (∠ C) = 110° then m (∠ B) = ...° (a) 77 (b) 55 (c) 180 (d) 125
101.	If ABCD is a parallelogram in which BC = 8 cm. , CD = 6 cm. , then its perimeter = ... (a) 14 cm. (b) 28 cm. (c) 48 cm. (d) 56 cm.
102.	The rectangle is a parallelogram each of its angles is ..... (a) obtuse. (b) acute. (c) right. (d) straight.
103.	The parallelogram whose diagonals are equal in length and not perpendicular is called ..... (a) square. (b) rectangle. (c) rhombus. (d) trapezium.
104.	The parallelogram whose diagonals are equal in length is ..... (a) square (b) rectangle (c) rhombus (d) triangle
105.	The parallelogram whose diagonals are perpendicular and not equal in length is called ..... (a) rhombus (b) square (c) rectangle (d) trapezium
106.	If two adjacent sides are equal in length in a parallelogram , then the figure is a ..... (a) square. (b) rhombus. (c) rectangle. (d) trapezium.
107.	The side length of the rhombus which its perimeter 36 cm. is ..... cm. (a) 6 (b) 9 (c) 18 (d) 4
108.	If ABCD is a rhombus , then $\overline{AC} \perp$ ..... (a) $\overline{BD}$ (b) $\overline{AB}$ (c) $\overline{BC}$ (d) $\overline{CD}$

Choose the correct answer from the given ones:

(1) ABCD is a parallelogram in whish: m $(\angle A) = 50^{\circ}$, then m $(\angle C)$ = ...

(a) 50° (b) 60° (c) 130° (d) 150°

(2) ABCD is a parallelogram in whish: m $(\angle A)$ + m $(\angle C) = 140^{\circ}$, then m $(\angle B)$ = ...

(a) 70° (b) 40° (c) 110° (d) 220°

(3) If the lengths of two consecutive sides of a parallelogram are 3 cm. and 5 cm., then its perimeter equals ..... cm.

(a) 12 (b) 14 (c) 16 (d) 18

(4) If the perimeter of a parallelogram is 25 cm. and if one of its side is of length 7 cm., then the consecutive side is of length ..... cm.

(a) 7 (b) 18 (c) 12.5 (d) 5.5)

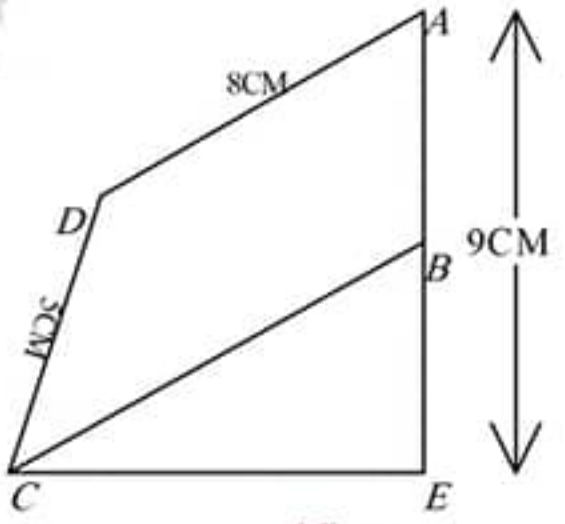
(5) In the opposite figure:

If ABCD is parallelogram,

$E \in \overrightarrow{AB}$, CD = 5 cm., AE = 9 cm.

AD = 8 cm., the perimeter of ΔBEC

= 18 cm., then length of $\overline{EC}$ = ... cm.



(a) 8 (b) 6 (c) 5 (d) 4

(6) The two diagonals of a rectangle .....

(a) are perpendicular (b) are equal in length.

(c) are perpendicular and equal in length. (d) bisect its interior angles.

(7) The two diagonals of a rhombus are .....

(a) perpendicular and are not equal.

(b) equal in length and are not perpendicular.

(c) perpendicular and equal in length.

(d) not equal in length and are not perpendicular.

(8) The two diagonals of the square, are .....
(a) just perpendicular.
(b) just equal in length.
(c) perpendicular and equal in length.
(d) not equal in length and are not perpendicular.

(9) If two adjacent sides are equal in length in a parallelogram, then the figure is a .....
(a) square. (b) rhombus. (c) rectangle. (d) trapezium.

(10) If: ABCD is a square, then: m (∠ CAB) =
(a) 90^o (b) 45^o (c) 60^o (d) 30^o

(11) If: ABCD is a rectangle in which AC = 5 cm., then: BD = ... cm.
(a) 2.5 (b) 5 (c) 10 (d) 20

(12) If: ABCD is a parallelogram in which m (∠ A) = m (∠ B), then: ABCD is a .....
(a) rectangle. (b) rhombus. (c) square. (d) trapezium.

(13) If: ABCD is a rhombus in which m (∠ ACB) = 32°, then : m (∠ D) = ...
(a) 32^o (b) 64^o (c) 116^o (d) 26^o

(14) The measure of the interior angle of the regular hexagon is .....
(a) 720^o (b) 120^o (c) 150^o (d) 108^o

(15) If two adjacent sides are equal in length in a parallelogram, then the figure is a .....
(a) square. (b) rhombus. (c) rectangle. (d) trapezium.

(16) ABCD is a parallelogram in which: m (∠A) = 70°, then m (∠ C) = ...
(a) 110° (b) 180° (c) 100^o (d) 70^o

(17) The sum of measures of the exterior angles of a triangle equals .....
(a) 180° (b) 100° (c) 360° (d) 90°

(18) The parallelogram which has a right angle is called a .....
(a) rhombus. (b) rectangle. (c) square. (d) trapezium.

(19) If the measure of an interior angle of a regular polygon is 150^o, then the number of its sides is .....
(a) 6 (b) 8 (c) 10 (d) 12

(20) A rhombus of perimeter 60 cm., then its side length =..... cm.
(a) 20 (b) 18 (c) 15 (d) 10

(21) The sum of measures of the interior angles of a polygon of n sides = ...
(a) $n \times 180°$ (b) $(n-2) \times 180°$ (c) $\frac{(n-2)\times 180}{n}$ (d) $\frac{(n-2)\times 180}{2n}$

(22) If ABCD is a square then m (∠CAB) = ...
(a) $90°$ (b) $45°$ (c) $60°$ (d) $30°$

(23) The sum of measures of the exterior angles of a regular pentagon = ...
(a) $108°$ (b) $120°$ (c) $360°$ (d) $540°$

(24) In the parallelogram, the sum of measures of each two consecutive angles equals .....
(a) $90°$ (b) $360°$ (c) $120°$ (d) $180°$

(25) The parallelogram in which the two diagonals are equal in length and perpendicular is called a .....
(a) rectangle. (b) square. (c) rhombus. (d) trapezium.

١

اجابات الجزء الثاني من المذكره

Choose

١ 50°

٢ 110

٣ 16

٤ 5.5

٥ 6

٦ are equal in length

٧ perPendicular and are not equal

٨ Perpendicular and equal in length

٩ Rhombus

١٠ 45°

11 5

12 Rectangle

13 116

14 120

15 Rhombus

16 7°

17 36°

18 Rectangle

19 12

20 15

21 $(n-2) \times 18^\circ$

22 45°

23 36°

24 180

25 Square

❶ Answer the following questions :-

1	the multiplicative inverse of the number $(\frac{3}{7})^0$ = ...	($\frac{7}{3}$, $-\frac{3}{7}$, 1 , 0)
2	$4^x + 4^x + 4^x + 4^x$ = ...	(4^{x+4} , 4^{4x} , 4^{x+1} , $4x^4$)
3	$(3ab^2)^3$ = ...	($3a^3b^5$, $9a^3b^6$, $27a^3b^6$, $9a^3b^6$)
4	If $a = 7^x$ and $b = 7^{-x}$, then $a \times b$ = ...	(7^{2x} , 49^{2x} , 1 , 0)
5	Twice the number 2^5 = ...	(2^{10} , 2^6 , 4^{10} , 4^5)
6	If $a^x = 2$ and $a^{-y} = 3$, then a^{x-y} = ...	(1 , -1 , $\frac{2}{3}$, 6)
7	$\left(\frac{a}{b}\right)^2 \times \frac{b^2}{a^2}$ = ... ($where\ ab \neq 0$)	(ab , $(\frac{a}{b})^4$, $(ab)^0$, $\frac{a}{b}$)
8	The additive inverse of the number $(-3)^0$ = ...	(1 , -3 , 3 , $-(3)^0$)
9	$3^{10} + 3^{10} + 3^{10}$ = ...	(3^{10} , 3^{30} , 9^{10} , 3^{11})
10	$\frac{6\,a^2\,x^4}{2\,a^3\,x^3}$ = ...	($3ax$, $3a^5x^7$, $\frac{3x}{a}$, $\frac{3}{ax}$)
11	The quarter of the number 4^{20} = ...	(4^5 , 4^{10} , 4^{19} , 2^{10})
12	$3^{-1} + 3^{-1} + 3^{-1}$ = ...	(3^{-3} , 3^3 , 9^{-3} , 1)
13	The multiplicative inverse of 5^{-1} is	($\frac{1}{5}$, 5 , -5 , $-\frac{1}{5}$)
14	$\frac{1}{4} \times 4^{20}$ = ...	(4^{15} , 4^{19} , 2^{19} , 2^{39})
15	The multiplicative inverse of the number $(-1)^3$ is	($(-1)^3$, $(-1)^2$, 1^3 , 1^2)
16	If $y^{26} + y^{27} = 0$, then y = ...	(1 , -1 , 2 , -2)
17	The additive inverse of the number $(-\frac{2}{5})^2$ is	($\frac{4}{25}$, $-\frac{4}{25}$, $\frac{25}{4}$, $-\frac{25}{4}$)
18	$(\frac{1}{4})^0 + \frac{1}{4}$ = ...	($\frac{1}{4}$, $\frac{3}{4}$, $\frac{5}{4}$, $\frac{2}{4}$)
19	$5^2 + 5^2$ = ...	(5^4 , 10^2 , 50 , 10^4)
20	$(\frac{3}{5})^2 \times (\frac{5}{3})^{-2}$ = ...	($(\frac{3}{5})^4$, 1 , $(\frac{3}{5})^{-4}$, 0)
21	$2^4 \times 3^4$ = ...	(5^4 , 6^4 , 6^8 , 6^{16})
22	$\frac{5^x}{5^{-y}}$ = ...	($5^{x \div y}$, 5^{x-y} , 5^{x+y} , $-\frac{x}{y}$)
23	If $xy^{-1} = \frac{1}{2}$, then $\frac{y}{x}$ = ...	($\frac{1}{2}$, $-\frac{1}{2}$, 1 , 2)

24	$(3)^{-1}$ = ...	($-\frac{1}{3}$, $\frac{1}{3}$, 3 , -3)
25	If $\frac{x}{y}=\frac{7}{2}$, then $\frac{2x}{7y}$ = ...	(1 , $\frac{7}{2}$, $\frac{2}{7}$, $\frac{49}{9}$)
26	$3x^{-1}$ = ...	($-3x$, $\frac{3}{x}$, $3x$, $\frac{1}{3x}$)
27	10% of L.E $2\frac{1}{2}$ = L.E	($\frac{1}{4}$, $\frac{1}{2}$, 1 , 25)
28	$(\frac{2}{3})^2 \times \frac{2}{3}$ = ...	($\frac{4}{9}$, $\frac{2}{3}$, $\frac{-4}{9}$, $\frac{8}{27}$)
29	$(\frac{-2}{3})^{-3}$ = ...	($\frac{-27}{8}$, $\frac{-8}{27}$, $\frac{8}{27}$, $\frac{27}{8}$)
30	$2^5 + 2^5$ = ...	(4^5 , 2^{10} , 2^6 , 2^{20})
31	if $x=-\frac{2}{3}$, $y=2$, then x^y = ...	($\frac{4}{9}$, $-\frac{4}{9}$, $\frac{8}{27}$, $-\frac{8}{27}$)
32	10 halves ..... 20 fifths	(< , > , =)
33	if $(2^x)^y = 8$, then	($x+y=3$, $xy=3$, $x-y=3$, $\frac{x}{y}=3$)
34	If $x = y$, then $(\frac{3}{5})^{x-y}$ = ...	($\frac{3}{5}$, $\frac{5}{3}$, 1 , 0)
35	if $\left(\frac{1}{2}\right)^x = 8$, then x = ...	(4 , -4 , 3 , -3)
36	The half of the number 2^{20} = ...	(2^{10} , 1^{20} , 2^{19} , 2^{40})
37	$(x^2)^{-3} \times x^6$ = ...	(x^{12} , x^{-12} , x , 1)
38	If $a^{-1}=\frac{2}{3}$, then a = ...	($-\frac{2}{3}$, $\frac{3}{2}$, $-\frac{3}{2}$, 1)
39	$x^2 + x^2$ = ...	(x^4 , x^2 , $2x^2$, $2x^4$)
40	if $2ab = 10$, then a^2b^2 = ...	
41	If $a \div b = 1$, then b = ...	
42	$2\frac{1}{4}=(\frac{-3}{2})$	
43	$(-\frac{2}{5})^3$ = ... , $(3^2)^{-1}$ = ...	
44	$2^5 \times 5^5 = 10$	
45	$(1\frac{1}{2})^{-2}$ = ...	
46	The additive inverse of $(-\frac{2}{3})^2$ is	
47	$(2x)^2 \times \frac{1}{x}$ = ...	

48	$(\frac{3}{4})^2 \div (\frac{3}{4})^3$ = ...
49	The smallest odd prime number is .....
50	The multiplicative identity element in Q is .....
51	$(x-5)^0 = 1$, if $x \neq$ .....
52	$3^{12} \times 3^{-12} = 5^{.....}$
53	$\left(\frac{4}{9}\right)^{-2} = \left(\frac{9}{4}\right)^{n}$, then n = ...
54	If $\frac{a}{b} = 0.2$, then $\left(\frac{a}{b}\right)^3$ = ...
55	If half of $2^{40} = 2^n$, then n = ...
56	Twice the number $\frac{1}{2}$ = ...
57	$\frac{9}{25} = \left(\frac{5}{3}\right)^{.....}$
58	$\frac{6x^5}{3x^2} + 3x^3$ = ...

1 Answer the following questions :-

1	The diagonals are equal in length in ..... (rhombus , rectangle , trapezium , parallelogram)
2	In a parallelogram if the adjacent sides are equal in the length , then the shape is ..... (square , rhombus , rectangle , trapezium)
3	The number of diagonals of a pentagon is ..... (3 , 5 , 7 , 9)
4	The measure of each angle of regular hexagon = ...° (60 , 108 , 120 , 135)
5	The two diagonals are equal in length and not perpendicular in ..... (parallelogram , rectangle , rhombus , square)
6	The sum of measure of the interior angles of a triangle = ...° (90 , 360 , 180 , 540)
7	The diagonals are equal and perpendicular in ..... (rhombus , square , rectangle , parallelogram)
8	If the measure of an interior angle of regular polygon is 135° , then the number of its sides is ..... (6 , 4 , 7 , 8)

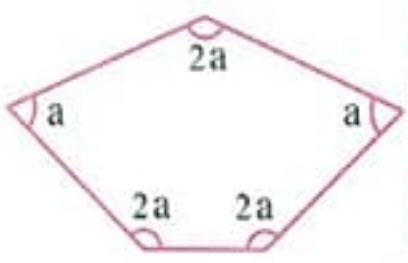
9	The sum of the measures of the interior angles of a pentagon = ...° (108 , 180 , 540 , 720)
10	In the ..... the two diagonals are perpendicular and not equal in length (square , parallelogram , rectangle , rhombus)
11	$if\ ABCD$ is a parallelogram , in which $BC = 8\ cm.$ and $CD = 6\ cm.$, then its perimeter = ... $cm.$ (14 , 28 , 48 , 56)
12	In the parallelogram $ABCD$ if $m(\angle A) = 70^\circ$, then $m(\angle B)$ = ...° (110 , 70 , 100 , 180)
13	The sum of measures of the exterior angles of hexagon = ...° (45 , 60 , 360 , 30)
14	The sum of measures of the exterior angles of the triangle equals ..... (90° , 180° , 360° , 720°)
15	$if\ ABCD$ is a rhombus and $m(\angle ACB) = 32^\circ$, then $m(\angle B)$ = ...° (148 , 161 , 116 , 32)
16	If two adjacent sides in a parallelogram are equal in length , it is a ..... (square , rhombus , rectangle , trapezium)
17	The rhombus whose two diagonals are equal in length is called ..... (square , triangle , rectangle , trapezium)
18	In the parallelogram $ABCD$ if $m(\angle A) = 60^\circ$, then $m(\angle C)$ = ...° (180 , 60 , 120 , 90)
19	The measure of each angle of regular triangle = ...° (60 , 108 , 120 , 135)
20	Each two vertically opposite angles are ..... (right , equal in measure , complementary , supplementary)
21	If $ABCD$ is a square , then $m(\angle CAB)$ = ... (30 , 45 , 60 , 90)
22	The number of diagonals of quadrilateral is ..... (0 , 3 , 2 , 4)
23	$ABCD$ is parallelogram in which $m(\angle A) + m(\angle C) = 100^\circ$, then $m(\angle B)$ = ...° (50 , 150 , 130 , 80)

24	The sum of measures of the exterior angles of any polygon = ...° (180 , 360 , 120 , 540)
25	The parallelogram whose diagonals are ..... Is a rectangle (parallel , perpendicular , equal in length , bisect each other)
26	$ABCD$ is parallelogram $m(\angle A) = m(\angle B)$, then $ABCD$ is a ..... (square , rhombus , rectangle , trapezium)
27	The measure of the interior angle of the regular octagon equals ..... (1080° , 180° , 135° , 108°)
28	If the measure of an interior angle of regular polygon = 120° then the number of its sides = ... (3 , 4 , 5 , 6)
27	In the parallelogram , the sum of measures of each two consecutive angles = ... (90 , 360 , 120 , 180)
28	The measure of the interior angle of a regular polygon of n sides equals ..... ($\frac{(n-2)\times 90}{n}$, $\frac{(n-2)\times 180}{2}$, $\frac{(n-2)\times 180}{n}$, $180 \times (n-1)$)
29	The angle whose measure is 179° is ..... (acute , right , obtuse , straight)

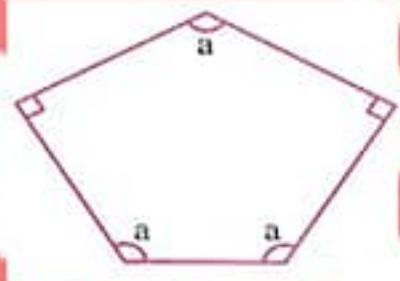
❷ complete :-

1	The rectangle in which its two diagonals are perpendicular is called .....
2	The polygon which has an interior reflex angle is called .....
3	The sum of measure of the accumulative angles at a point = ...
4	The two diagonals of the rhombus are ..... and .....
5	Sum of measures of the exterior angles of any convex polygon = ...
6	The length of the side of a rhombus whose perimeter is 24 cm. equals ..... Cm.
7	If the measure of exterior angle of regular polygon is 30° , then the number of sides = ...

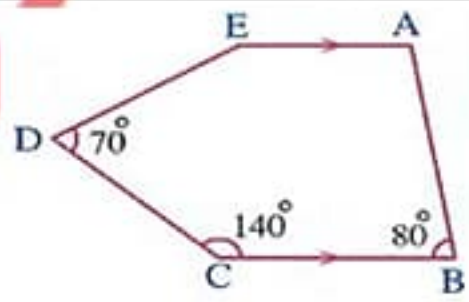
8	If $ABCD$ is a rhombus , then ..... $\perp$ .....
9	The rectangle in which its two adjacent sides have the same length is called .....
10	The quadrilateral in which two sides only are parallel is called .....
11	A rectangle is ..... with a right angle
12	If $m(\angle B) = 90^\circ$, then $m(\ reflex\angle B\ )$ = ...$^\circ$
13	in the parallelogram $XYZL$, if $m(\angle X) = \frac{1}{2} m(\angle Y)$, then $m(\angle Y)$ = ...
14	The square is a ..... With a right angle.
15	The measure of an interior angle of a regular polygon of 10 sides = ...
16	If $ABCD$ is a rhombus , $m(\angle ACB) = 31^\circ$, then $m(\angle D)$ = ...
17	If two lines intersect , then each two vertically opposite angles are .....
18	If the measure of each interior angle of a regular polygon is 140° , then the number of its sides is .....
19	The volume of a cube of side length 6 cm. is .....
20	Each two opposite angles of a parallelogram are .....
21	A rhombus is a ..... with two adjacent equal sides in length
22	The edge length of a cube whose volume is 27 cm^3 is ..... cm.
23	If the ratio among the measures of the interior angles of a quadrilateral is 2 : 3 : 3 : 4 , then the smallest measure of these angle is .....
24	If the measure of exterior angle of regular polygon is 30° , then the number of sides = ...



$Value\ of\ a$ = ...



$Value\ of\ a$ = ...



$m\ (\angle E)$ = ...

Choose the correct answer from those given

AL GEBRA

① The additive inverse ot the nmber $\left(-\frac{3}{5}\right)^2$ = ...

(a) $\frac{3}{5}$ (b) $-\frac{3}{5}$ (c) $-\frac{9}{25}$ (d) $\frac{9}{25}$

Answer .....

② $3^{10} + 3^{10} + 3^{10}$ = ...

(a) 3^{10} (b) 3^{11} (c) 3^{20} (d) 3^{30}

Answer .....

③ $(-2)^{82}$ ..... $(-2)^{83}$

(a) ≥ (b) < (c) = (d) >

Answer .....

④ Quarter of number 4^{20} equals .....

(a) 4^{19} (b) 4^{5} (c) 4^{16} (d) 1

Answer .....

GEOMETERY

⑤ The sum of the measures of accumulative angles at a point equals .....

(a) 180° (b) 90° (c) 360° (d) 630°

Answer .....

⑥ The sum of the measures of the interior angles of hexagon equals .....

(a) 360° (b) 480° (c) 540° (d) 720°

Answer .....

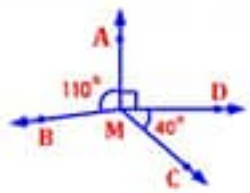
⑦ The number of the diagonals of the hexagon is .....

(a) 5 (b) 6 (c) 9 (d) 12

Answer .....

⑧ IN THE OPPOSITE FIGURE :

m (∠ BMC) = ...



(a) 90° (b) 110°

(c) 120° (d) 130°

Answer .....

Choose the correct answer from those given

AL GEBRA

① $4^x + 4^x + 4^x + 4^x =$ .....

(a) 4^x (b) 4^{x+1} (c) 4^{4x} (d) 4^{x+4}

Answer .....

② $-3ab^2 \times 2a^2b^3 =$ .....

(a) $6a^3b^5$ (b) $-6a^3b^5$ (c) $6ab$ (d) $-6ab$

Answer .....

③ $\frac{6a^2b^4}{2a^3b^3} =$ .....

(a) $3ab$ (b) $3a^5b$ (c) $\frac{3b}{a}$ (d) $\frac{3}{ab}$

Answer .....

④ If: $a = b$, then: $\left(-\frac{1}{2}\right)^{a-b} =$ .....

(a) 4^{19} (b) 4^5 (c) 4^{16} (d) 1

Answer .....

GEOMETERY

⑤ The measure of interior angle of the regular pentagon equals .....

(a) 60° (b) 90° (c) 108° (d) 120°

Answer .....

⑥ The sum of the exterior angles of the triangle equals .....

(a) 180° (b) 360° (c) 540° (d) 720°

Answer .....

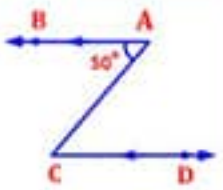
⑦ The measure of exterior angle of the regular octal equals .....

(a) 40° (b) 45° (c) 50° (d) 60°

Answer .....

⑧ IN THE OPPOSITE FIGURE :

m (∠ ACD) = ...



(a) 40° (b) 4°

(c) 50° (d) 60°

Answer .....

Choose the correct answer from those given

AL GEBRA

① $\left[\left(-\frac{2}{3}\right)^3 \times \left(\frac{1}{3}\right)^3\right] \div \left(-\frac{2}{9}\right)^2 =$ .....

(a) $-\frac{2}{9}$ (b) $\frac{2}{9}$ (c) $-\frac{9}{2}$ (d) $\frac{9}{2}$

Answer .....

② The multiplicative inverse of the number $\left(-\frac{2}{3}\right)^3$ is .....

(a) $\frac{8}{27}$ (b) $\frac{27}{8}$ (c) $-\frac{27}{8}$ (d) $\frac{9}{4}$

Answer .....

③ $3^x \times 3^x \times 3^x = 27$

(a) x (b) $3x$ (c) $x+3$ (d) $x-3$

Answer .....

④ If: $x = \frac{3}{7}$ and $y = 2\frac{1}{3}$ then: $(xy)^{-100} =$ .....

(a) 1 (b) -1 (c) 100 (d) -100

Answer .....

GEOMETERY

⑤ If the measure of each interior angle of a regular polygon is 108°, then: the number of its sides .....

(a) 4 (b) 5 (c) 6 (d) 7

Answer .....

⑥ ABCD is a parallelogram in which, m (∠ ABC) = 70°, then: m (∠ ADC) = ...

(a) 180° (b) 110° (c) 70° (d) 90°

Answer .....

⑦ The angle whose measure 50° complements an angle of measure .....

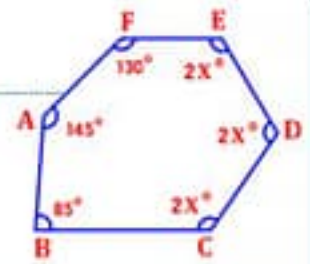
(a) 40° (b) 50° (c) 130° (d) 310°

Answer .....

⑧ **IN THE OPPOSITE FIGURE:**

The value of: X = ...

(a) 40° (b) 50°
(c) 60° (d) 70°



Answer .....

Choose the correct answer from those given

80

AL GEBRA

① The simplest form of: $\frac{(-2)^9 \times (-3)^5}{(-2)^7 \times (-3)^3} =$ .....

(a) $-\frac{4}{9}$ (b) $\frac{4}{9}$ (c) 36 (d) -36

Answer .....

② $(x\,y^{-2})^{-1} =$ .....

(a) $\frac{x}{y^2}$ (b) $\frac{x^2}{y}$ (c) $\frac{y}{x^2}$ (d) $\frac{y^2}{x}$

Answer .....

③ Sixth of the the number: $2^{24} \times 3^{24} =$ .....

(a) 3^{23} (b) 2^{23} (c) 6^{23} (d) 6^4

Answer .....

④ The next number in the pattern 1, 4, 9, 16, 25 is .....

(a) 30 (b) 35 (c) 36 (d) 50

Answer .....

GEOMETERY

⑤ If two straight lines intersect, then: each of two vertically opposite angles are .....

(a) complementary (b) supplementary (c) alternate (d) congruent

Answer .....

⑥ A quadrilateral polygon, the ratio among the measures of its interior angles 1 : 2 : 3 : 4 ,then : the measure of its greatest angle equals .....

(a) 120° (b) 140° (c) 144° (d) 72°

Answer .....

⑦ The measure of interior angle of the regular hexagon equals .....

(a) 90° (b) 108° (c) 135° (d) 120°

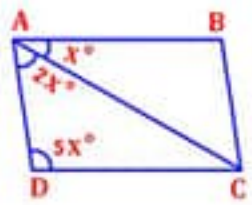
Answer .....

⑧ IN THE OPPOSITE FIGURE :

The value of : X = ...

(a) 22.5° (b) 33.5°

(c) 30° (d) 50°



Answer .....

Choose the correct answer from those given

AL GEBRA

① $5^2+5^2=5^2\times$ .....

(a) 5^2 (b) 5^3 (c) 2 (d) 5

Answer .....

② If: $a^x=2$, and $a^y=3$, then: $a^{x+y}=$ .....

(a) 2 (b) 3 (c) 5 (d) 6

Answer .....

③ If: $2^{12}\times a^{12}=6^{12}$, then: $a=$ .....

(a) 2 (b) 3 (c) 4 (d) 6

Answer .....

④ $5\,a^{\text{zero}}=$ .....

(a) 1 (b) -5 (c) 5 (d) $5a$

Answer .....

GEOMETERY

⑤ The number of diagonals of triangle equals .....

(a) zero (b) 1 (c) 2 (d) 3

Answer .....

⑥ The sum of the exterior angles of the equilateral triangle equals .....

(a) 180° (b) 360° (c) 60° (d) 120°

Answer .....

⑦ ABCD is a parallelogram in which , $m(\angle A)+m(\angle C)=150^\circ$, then : $m(\angle B)=$ .....

(a) 150° (b) 75° (c) 105° (d) 108°

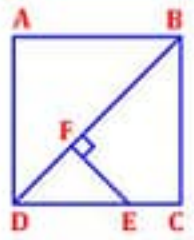
Answer .....

⑧ IN THE OPPOSITE FIGURE :

$m(\angle FEC)=$ .....

(a) 45° (b) 90°

(c) 135° (d) 120°



Answer .....